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 5
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10
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12
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13
14
15
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16
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17
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18
19
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20
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21
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24
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31 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 
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  href="/guide/dna-rna/howto/">DNA & RNA</a><a</pre>
  href="/quide/proteins/howto/">Proteins</a><a href="/quide/sequence-
  analysis/howto/">Sequence Analysis</a><a href="/quide/genes-
  expression/howto/">Genes & amp; Expression</a><a href="/quide/genomes-
  maps/howto/">Genomes & Maps</a><a href="/quide/domains-
  structures/howto/">Domains & Structures</a><a href="/guide/genetics-
  medicine/howto/">Genetics & Medicine</a><a</pre>
  href="/guide/taxonomy/howto/">Taxonomy</a><a href="/guide/data-</pre>
  software/howto/">Data & Software</a><a href="/quide/training-
  tutorials/howto/">Training & Tutorials</a><a
  href="/guide/homology/howto/">Homology</a><a href="/guide/small-
  molecules/howto/">Small Molecules</a><a</pre>
  href="/quide/variation/howto/">Variation</a>
  class="offscreen noflow ui-ncbimenu-item-skip access"><a href="#maincontent"</pre>
  title="Skip to the content" tabindex="0" accesskey="3">Skip to main
                 content</a>
134
  access"><a href="#navcontent" title="Skip to the navigation" tabindex="0"
  accesskey="4">Skip to
135
                 navigation</a><li class="offscreen noflow ui-ncbimenu-item-
  skip access"><a href="/sites/myncbi/about/accesskeys" title="About My NCBI
  Accesskeys" tabindex="0" accesskey="0">About NCBI Accesskeys</a>
  class="myncbi"><a href="/sites/myncbi/" title="My NCBI" id="myncbiusername"</pre>
  style="display: none;"></a><a href="/sites/myncbi/" title="My NCBI">My NCBI</a><a
  href="/sites/myncbi/" title="Sign in" id="sign in">Sign In</a><a
  href="/sites/myncbi/signout/" title="Sign Out" id="sign out" style="display:
  none;">Sign Out</a><script type="text/javascript">
  var c = jQuery.cookie('WebCubbyUser'); lre = /.*logged-in\=(\w*);.*/; ure =
  /.*my-name = (w*);.*/;
  if(c) \{ l = lre.exec(c); if(l[1] === 'true') \{ u = ure.exec(c); \}
  jQuery("#myncbiusername").text(u[1]).show(); jQuery("#sign in").hide();
  jQuery("#sign out").show(); } }
             </script></div></div>
138
139
      <div class="header">
140
      <!-- logo -->
141
      <div class="res logo" id="gene-top">
142
          <h1 class="res name"><a href="/gene">Entrez Gene</a></h1>
143
```

```
<h2 class="res tagline">Genes and mapped phenotypes</h2>
144
  </div>
145
      <!-- SearchBar -->
146
      <div class="search"><span class="tr"></span></span></span></span
147
   class="br"></span class="bl"></span></span class="tr2"></span><div
   class="search top"><label for="search term">Search:</label><select</pre>
   name="EntrezSystem2.PEntrez.Gene.Gene SearchBar.SearchResourceList" sid="1"
   id="database"><option value="/sites/gquery" resource="gquery">All
   Databases
   resource="pubmed">PubMed</option><option value="/protein"</pre>
   resource="protein">Protein</option><option value="/nuccore"
   resource="nuccore">Nucleotide</option><option value="/nucgss"
   resource="nucgss">GSS</option><option value="/nucest"</pre>
   resource="nucest">EST</option><option value="/structure"
   resource="structure">Structure</option><option value="/genome"</pre>
   resource="genome">Genome</option><option value="/biosample"
   resource="biosample">BioSample</option><option value="/biosystems"
   resource="biosystems">BioSystems</option><option value="/books"
   resource="books">Books</option><option value="/cancerchromosomes"
   resource="cancerchromosomes">CancerChromosomes</option><option value="/cdd"
   resource="cdd">Conserved Domains</option><option value="/gap"
   resource="gap">dbGaP</option><option value="/dbvar"</pre>
   resource="dbvar">dbVar</option><option value="/domains" resource="domains">3D
   Domains
   resource="epigenomics">Epigenomics</option><option selected="selected"
   value="gene" resource="gene">Gene</option><option value="/genomepri"
   resource="genomeprj">Genome Project</option><option value="/gensat"
   resource="gensat">GENSAT</option><option value="/geoprofiles"</pre>
   resource="geoprofiles">GEO Profiles</option><option value="/gds"
   resource="gds">GEO DataSets</option><option value="/homologene"
   resource="homologene">HomoloGene</option><option value="/images"
   resource="images">Images</option><option value="/journals"
   resource="journals">Journalsoption value="/mesh"
   resource="mesh">MeSH</option><option value="/ncbisearch"</pre>
   resource="ncbisearch">NCBI Web Site</option><option value="/nlmcatalog"
   resource="nlmcatalog">NLM Catalog</option><option value="/omia"
   resource="omia">OMIAoption value="/omim"
   resource="omim">OMIM</option><option value="/pepdome"
   resource="pepdome">Peptidome</option><option value="/pmc"
   resource="pmc">PMC</option><option value="/popset"</pre>
   resource="popset">PopSet</option><option value="/probe"
   resource="probe">Probe</option><option value="/proteinclusters"
   resource="proteinclusters">Protein Clusters
   resource="pcassay">PubChem BioAssay</option><option value="/pccompound"
   resource="pccompound">PubChem Compound</option><option value="/pcsubstance"
   resource="pcsubstance">PubChem Substance</option><option value="/snp"
   resource="snp">SNP</option><option value="/sra"</pre>
   resource="sra">SRA</option><option value="/taxonomy"</pre>
   resource="taxonomy">Taxonomy</option><option value="/toolkit"
   resource="toolkit">ToolKit</option><option value="/toolkitall"
   resource="toolkitall">ToolKitAll</option><option value="/unigene"
   resource="unigene">UniGene</option><option value="/unists"
   resource="unists">UniSTS</option></select></div><div class="search bottom"><input
   name="EntrezSystem2.PEntrez.Gene.Gene SearchBar.Term" sid="1" type="text"
   id="search term" value="" title="Search Gene" cmd="Go" class="jig-
   ncbiautocomplete"
   config="isEnabled:false, disableUrl:'EntrezSearchBarAutoComplCtrl'"
```

```
autocomplete="off" suggest="true" /><button</pre>
   name="EntrezSystem2.PEntrez.Gene.Gene SearchBar.Search" sid="1" id="search"
   class="button search" cmd="go">Search</button><button</pre>
   name="EntrezSystem2.PEntrez.Gene.Gene SearchBar.Clear" sid="1" id="Clear"
   class="button clear">Clear</button></div><div class="search extras"><ul</pre>
   class="inline list"><a</pre>
   name="EntrezSystem2.PEntrez.Gene.Gene SearchBar.LimitsLink" sid="1"
   onclick="return false;" href="/gene/limits"
   id="EntrezSystem2.PEntrez.Gene.Gene SearchBar.LimitsLink">Limits</a><a
   name="EntrezSystem2.PEntrez.Gene.Gene SearchBar.Advanced" sid="1" onclick="return
   false;" href="/gene/advanced"
   id="EntrezSystem2.PEntrez.Gene.Gene SearchBar.Advanced">Advanced
   search</a><a name="Help"
   href="http://www.ncbi.nlm.nih.gov/bookshelf/br.fcgi?
   book=helpgene&part=EntrezGene" target=" blank"
   id="Help">Help</a></div><input</pre>
   name="EntrezSystem2.PEntrez.Gene.Gene SearchBar.CurrDb" sid="1" type="hidden"
   value="gene" /><script type="text/javascript">
                           var d = document.getElementById('search term');
148
                           if (d) {d.focus();}
149
                   </script></div>
150
   </div>
151
       <input
152
   name="EntrezSystem2.PEntrez.Gene.Entrez PageController.PreviousPageName" sid="1"
   type="hidden" value="results" />
       <div class="2col">
153
       <div class="container">
154
           <div id="maincontent" class="content">
155
               <div class="results settings one setting"><h4 class="left</pre>
156
   display settings content header jig-ncbipopper" id="display set"
   config="targetPosition : 'bottom center', sourcePosition : 'top
   center', sourceSelector : '#display settings menu',
                                                                  hasArrow:
   false,openMethod : 'click',closeMethod : 'click',isSourceElementCloseClick:
   false,addCloseButton : true,
                                            multipleHandlesSelector:'#display set ~
   ul.display settings a', groupName: 'entrez pg'"><a href="#"
   class="tgt dark">Display Settings:</a></h4>
   display settings"><a
   name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.Display"
   sid="2" href="#" sourceContent="display settings menu"
   id="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.Display">Full
   Report</a><div id="display settings menu" class="disp settings
   tabPopper"><fieldset class="format"><legend>Format</legend><ul
   class="column list"><input type="radio"</pre>
   name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.sPresentation"
   sid="1" value="full report" format="" id="full report" checked="true" /><label</pre>
   for="full report">Full Report</label><iipput type="radio"</pre>
   name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.sPresentation"
   sid="2" value="full report" format="text" id="full reporttext" /><label</pre>
   for="full reporttext">Full Report (text)</label><input type="radio"</pre>
   name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.sPresentation"
   sid="3" value="gene table" format="" id="gene table" /><label</pre>
   for="gene table">Gene Table</label>input type="radio"
   name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.sPresentation"
   sid="4" value="gene table" format="text" id="gene tabletext" /><label</pre>
   for="gene_tabletext">Gene Table (text)</label><input type="radio"</pre>
   name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.sPresentation"
   sid="5" value="GeneRif" format="" id="GeneRif" /><label</pre>
```

```
for="GeneRif">GeneRif</label><input type="radio"</pre>
   name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.sPresentation"
   sid="6" value="DocSum" format="" id="DocSum" /><label</pre>
   for="DocSum">Summary</label><input type="radio"</pre>
   name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.sPresentation"
   sid="7" value="DocSum" format="text" id="DocSumtext" /><label</pre>
   for="DocSumtext">Summary (text)</label><iipput type="radio"</pre>
   name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.sPresentation"
   sid="8" value="Brief" format="" id="Brief" /><label</pre>
   for="Brief">Brief</label><input type="radio"</pre>
   name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.sPresentation"
   sid="9" value="Brief" format="text" id="Brieftext" /><label for="Brieftext">Brief
   (text)</label><input type="radio"</pre>
   name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.sPresentation"
   sid="10" value="ASN1" format="text" id="ASN1text" /><label</pre>
   for="ASN1text">ASN.1</label><input type="radio"</pre>
   name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.sPresentation"
   sid="11" value="XML" format="text" id="XMLtext" /><label</pre>
   for="XMLtext">XML</label><input type="radio"</pre>
   name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.sPresentation"
   sid="12" value="uilist" format="text" id="uilisttext" /><label</pre>
   for="uilisttext">UI List</label></fieldset><button</pre>
   name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.SetDisplay"
   sid="1" class="button apply ncbipopper-close-button">Apply</button></div><h4
   class="content header send to align right jig-ncbipopper" id="sendto"
   config="targetPosition:'bottom center', sourcePosition : 'top
   center',sourceSelector : '#send to menu', hasArrow : false,
   openMethod : 'click', closeMethod : 'click', isSourceElementCloseClick: false,
   addCloseButton:true, groupName: 'entrez pg'"><a href="#"
   sourceContent="send to menu" class="tgt dark">Send to:</a><script
   type="text/javascript">
                            jQuery(document).ready( function () {
157
                                jQuery("#send to menu input[type='radio']").click(
158
   function () {
                                    var selectedValue =
   jQuery(this).val().toLowerCase();
                                    var selectedDiv = jQuery("#send to menu div." +
160
   selectedValue);
161
                                    if(selectedDiv.is(":hidden")){
162
                                    jQuery("#send to menu
163
   div.submenu:visible").slideUp();
                                    selectedDiv.slideDown();
164
165
                                });
166
167
                            });
168
169
                            jQuery("#sendto").bind("ncbipopperclose", function(){
170
                                jQuery("#send to menu
171
   div.submenu:visible").css("display", "none");
                                jQuery("#send to menu
172
   input[type='radio']:checked").attr("checked", false);
                            });
173
174
                       </script></h4><div id="send to menu" class="tabPopper
175
   send to"><fieldset><legend>Choose Destination</legend><ul</pre>
```

```
class="column list"><input type="radio"</pre>
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.SendTo"
    sid="1" value="File" id="dest File" /><label</pre>
    for="dest File">File</label><input type="radio"</pre>
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.SendTo"
    sid="2" value="AddToClipboard" id="dest AddToClipboard" /><label</pre>
    for="dest AddToClipboard">Clipboard</label><input type="radio"</pre>
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.SendTo"
    sid="3" value="AddToCollections" id="dest AddToCollections" /><label</pre>
    for="dest AddToCollections">Collections</fieldset><div</pre>
    class="submenu file" id="submenu File" style="display: none;">class="submenu file" style="submenu file" style="sub
    id="submenu File hint" class="hidden"><label
    for="file format">Format</label><select id="file format"</pre>
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.FFormat"
    sid="1"><option value="full report" format="text" selected="selected">Full Report
     (text)</option><option value="gene table" format="text">Gene Table
     (text)option value="DocSum" format="text">Summary
     (text) </option >< option value="Brief" format="text" > Brief (text) </option >< option
    value="ASN1" format="text">ASN.1</option><option value="XML"
    format="text">XML</option><option value="uilist" format="text">UI
    List</option></select><button
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.SendToSubmit"
    sid="1" class="button apply file ncbipopper-close-button" type="submit"
    cmd="File">Create File/div><div class="submenu addtoclipboard"</pre>
    id="submenu AddToClipboard" style="display: none;"><p</pre>
    id="submenu AddToClipboard hint" class="hidden"><button</pre>
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.SendToSubmit"
    sid="2" class="button apply clipboard ncbipopper-close-button" type="submit"
    cmd="AddToClipboard">Add to Clipboard</button></div><div class="submenu"</pre>
    addtocollections" id="submenu AddToCollections" style="display: none;"><p
    id="submenu AddToCollections hint" class="hidden"><button
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.SendToSubmit"
    sid="3" class="button apply collections ncbipopper-close-button" type="submit"
    cmd="AddToCollections">Add to Collections</div></div></div><input</pre>
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.FileFormat"
    sid="1" type="hidden" value="full report" /><input</pre>
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.LastPresentati
    on" sid="1" type="hidden" value="full report" /><input
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.Presentation"
    sid="1" type="hidden" value="full report" /><input</pre>
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.PageSize"
    sid="1" type="hidden" value="20" /><input</pre>
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.LastPageSize"
    sid="1" type="hidden" value="20" /><input</pre>
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.Sort" sid="1"
    type="hidden" value="" /><input</pre>
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.LastSort"
    sid="1" type="hidden" value="" /><input</pre>
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.FileSort"
    sid="1" type="hidden" value="" /><input</pre>
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.Format"
    sid="1" type="hidden" value="" /><input</pre>
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene DisplayBar.LastFormat"
    sid="1" type="hidden" value="" /></div></div></div>
                       <div id="messagearea" class="empty">
176
                             'ul id="msgportlet" class="messages">
178
```

177

```
10/29/2010
                                view-source:www.ncbi.nlm.nih.gov/sit...
                      <div></div>
 179
                  </div>
 180
                  <div class="">
 181
 182
                      <div><h2 class="result count"></h2><span id="result sel"</pre>
 183
    class="nowrap"></span><input</pre>
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Entrez ResultsController.Resul
    tCount" sid="1" type="hidden" value="1" /><input
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Entrez ResultsController.RunLa
    stQuery" sid="1" type="hidden" /></div>
                 </div>
 184
                  <div class="rprt full-rprt">
 185
             <a id="pageTop"></a><div class="rprt-header">
 186
       <h1 class="title"><span class="gn">Agp2</span> aguaporin 2 (collecting duct) [
 187
     <em class="tax">Rattus norvegicus</em> ]
 188
       <span class="geneid">Gene ID: 25386, updated on 31-Aug-2010/span>
 189
    </div>
 190
 191
             <div class="rprt-body">
 192
                      <div class="rprt-section gene-Summary">
 193
      <a id="geneSummary"></a>
 194
       <div class="tophelp">
 195
         <a href="/bookshelf/br.fcgi?</pre>
 196
    book=helpgene&part=EntrezGene#EntrezGene.Summary 2" title="Help"
     class="genefullhelp">
 197
           <span>Help</span>
         </a>
 198
         <a href="#gene-top" title="Go to the top of the page" class="genefulltop">
 199
           <span>top of page</span>
 200
         </a>
 201
       </div>
 202
       <h2 class="secttitle">
 203
         <a class="jig-ncbitoggler-open">
 204
           <span class="ui-ncbitoggler-master-text">Summary</span>
 205
         </a>
 206
       </h2>
 207
       <div class="rprt-section-body">
 208
 209
         <div id="summaryDiv" class="section">
           <dl id="summaryD1">
 210
             <dt class="noline"> Official
 211
                                Symbol</dt>
 212
             <dd class="noline">Aqp2<span class="prov">provided by <a</pre>
 213
    href="http://rgd.mcw.edu/nomen/nomen.shtml" target=" blank" title="Rat Genome
    Database">RGD</a></span></dd>
             <dt> Official
 214
                                Full Name</dt>
 215
             <dd>aquaporin 2 (collecting duct) < span class="prov" > provided by <a</pre>
 216
    href="http://rgd.mcw.edu/nomen/nomen.shtml" target=" blank" title="Rat Genome
    Database">RGD</a></span></dd>
             <dt>Primary source</dt>
 217
 218
               <a href="http://rgd.mcw.edu/generalSearch/RgdSearch.jsp?</pre>
 219
     quickSearch=1& searchKeyword=2142">RGD:2142</a>
 220
             <dt>See related</dt>
 221
             < dd >
 222
```

```
<a
223
   href="http://www.ensembl.org/id/ENSRNOG0000000297">Ensembl:ENSRNOG0000000297;
   a>
              <a href="http://ratmap.gen.gu.se/ShowSingleLocus.htm?"</pre>
224
   accno=41271">RATMAP:41271</a>
           </dd>
225
           <dt>Gene type</dt>
226
           <dd>protein coding</dd>
227
           <dt>RefSeq status</dt>
228
           <dd>PROVISIONAL</dd>
229
           <dt>Organism</dt>
230
           <dd class="tax">
231
              <a href="http://www.ncbi.nlm.nih.gov/Taxonomy/Browser/wwwtax.cgi?
232
   id=10116">Rattus norvegicus</a>
           </dd>
233
           <dt>Lineage</dt>
234
           <dd class="tax">Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
235
   Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
   Sciurognathi; Muroidea; Muridae; Murinae; Rattus</dd>
           <dt>Also known as</dt>
236
           <dd>AQP-2; MGC156502; aquaporin-2; Aqp2</dd>
237
           <dt>Summary</dt>
238
           <dd>water channel protein involved in water reabsorption and vasopressin
239
   regulation in kidney collecting duct cells; mutation is linked to nephrogenic
   diabetes insipidous (NDI) [RGD] < /dd>
         </dl>
240
       </div>
241
     </div>
242
   </div>
243
244
                    <link rel="stylesheet" type="text/css"</pre>
245
   href="/portal/portal3rc.fcqi/css/413029" /><link rel="stylesheet" type="text/css"</pre>
   href="http://www.ncbi.nlm.nih.gov/core/extjs/ext-3.1.1/resources/css/xtheme-
   gray.css" id="theme" /><link rel="stylesheet" type="text/css"</pre>
   href="http://www.ncbi.nlm.nih.gov/projects/sviewer/css/style.css" media="screen,
   projection, print" /><script type="text/javascript"</pre>
   src="http://www.ncbi.nlm.nih.gov/core/extjs/ext-3.1.1/adapter/ext/ext-
   base.js"></script><script type="text/javascript"
   src="http://www.ncbi.nlm.nih.gov/core/extjs/ext-3.1.1/ext-
   all.js"></script><script type="text/javascript"
   src="http://www.ncbi.nlm.nih.gov/projects/sviewer/js/main.js"></script><div</pre>
   class="rprt-section gene-GenomicProduct">
     <a id="geneGenomic regions, transcripts, and products"></a>
246
     <div class="tophelp">
247
       <a href="/bookshelf/br.fcgi?</pre>
248
   book=helpgene&part=EntrezGene#EntrezGene.Genomic Regions Transcripts a"
   title="Help" class="genefullhelp">
         <span>Help</span>
249
250
       <a href="#gene-top" title="Go to the top of the page" class="genefulltop">
251
         <span>top of page</span>
252
       </a>
253
     </div>
254
     <h2 class="secttitle">
255
       <a class="jig-ncbitoggler-open">
256
         <span class="ui-ncbitoggler-master-text">Genomic regions, transcripts, and
257
   products</span>
```

```
10/29/2010
                             view-source:www.ncbi.nlm.nih.gov/sit...
        </a>
 258
      </h2>
 259
      <div class="rprt-section-body">
 260
        <div>
 261
          262
                                                             (plus) Go to <a
 263
    href="#geneReference sequences">reference sequence details</a><br />
 264
        <div class="seq-viewer">
 265
          <div class="embeded-sq-viewer" style="clear:both;">
 266
            <div id="divgenefullreport" class="SeqViewerApp"</pre>
 267
    rel="embedded=true&noslider=1&id=NC 005106.2&from=138325050&to=13
    8331696"></div>
          </div>
 268
        </div>
 269
      </div>
 270
    </div>
 271
 272
                    <div class="rprt-section gene-GenomicContext">
 273
      <a id="geneGenomic context"></a>
 274
      <div class="tophelp">
 275
        <a href="/bookshelf/br.fcgi?
 276
    book=helpgene&part=EntrezGene#EntrezGene.Genomic Context" title="Help"
    class="genefullhelp">
          <span>Help</span>
 277
 278
        <a href="#gene-top" title="Go to the top of the page" class="genefulltop">
 279
          <span>top of page</span>
 280
        </a>
 281
      </div>
 282
      <h2 class="secttitle">
 283
        <a class="jig-ncbitoggler-open">
 284
          <span class="ui-ncbitoggler-master-text">Genomic context</span>
 285
 286
        </a>
      </h2>
 287
      <div class="rprt-section-body">
 288
 289
          <strong>chromosome:</strong> 7; <strong>Location:
 290
    </strong>7q36
          291
            <a href="/mapview/map search.cgi?
 292
    direct=on&idtype=gene&id=25386">See Aqp2 in MapViewer</a>
          293
        </div>
 294
        <img usemap="#nbrMap25386 62750807" border="0"</pre>
 295
    alt="Genomic Context describing neighboring genes" src="/gutils/geneneighb.fcgi?
    geneid=25386&nuc gi=62750807&n0=Bcdin3d&n1=Faim2&n2=Aqp2&n3=A
    qp5&n4=Aqp6" /><map name="nbrMap25386 62750807" id="nbrMap25386 62750807">
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    onMouseOut="hidetip()" coords="27,23,77,31" alt="Neighboring gene BCDIN3 domain
    containing" href="/gene/363001" />
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 297
    molecule 2')" onMouseOut="hidetip()" coords="113,23,210,31" alt="Neighboring gene
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    href="/gene/25241" />
```

```
299 | <area shape="rect" onMouseOver="showtip(this, event, 'aquaporin 6, kidney
   specific') " onMouseOut="hidetip() " coords="393,23,423,31" alt="Neighboring gene
   aquaporin 6, kidney specific" href="/gene/29170" />
  </map>
300
  301
    </div>
302
   </div>
303
304
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305
          <a id="geneBibliography"></a><div class="tophelp"><a</pre>
306
   href="/bookshelf/br.fcgi?
   book=helpgene&part=EntrezGene#EntrezGene.Bibliography" title="Help"
   class="genefullhelp"><span>Help</span></a><a href="#gene-top" title="Go to the
   top of the page" class="genefulltop"><span>top of page</span></a></div><h2
   class="secttitle"><a class="jig-ncbitoggler-open"><span class="ui-ncbitoggler-
   master-text">Bibliography</span></a></h2>
307
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308
309
                  <div class="generif-pubmed"><h3>Related articles in
310
   PubMed</h3><div class="generefbl-link"><a
   href="/pubmed/20432437/">Adaptation to alkalosis induces cell cycle delay and
   apoptosis in cortical collecting duct cells: role of Aquaporin-2.</a> Rivarola V,
   <em>et al. J Cell Physiol, 2010 Aug. PMID 20432437.
  href="/pubmed/20130117/">Dehydration-induced increase in aquaporin-2 protein
   abundance is blocked by nonsteroidal anti-inflammatory drugs.</a> Baggaley E,
   <em>et alAm J Physiol Renal Physiol, 2010 Apr. PMID 20130117.
  href="/pubmed/20107111/">Cyclooxygenase 2 inhibition exacerbates AQP2 and pAQP2
   downregulation independently of V2 receptor abundance in the postobstructed
   kidney.</a> Jensen AM, <em>et al</em>. Am J Physiol Renal Physiol, 2010 Apr. PMID
   20107111.<a href="/pubmed/20089674/">Quantitative analysis of aquaporin-
   2 phosphorylation.</a> Xie L, <em>et al</em>. Am J Physiol Renal Physiol, 2010
  Apr. PMID 20089674.1i><a href="/pubmed/19794145/">FAPP2 is required for
   aquaporin-2 apical sorting at trans-Golgi network in polarized MDCK cells.</a>
   Yui N, <em>et al</em>. Am J Physiol Cell Physiol, 2009 Dec. PMID
   19794145.class="see-all-pm"><a href="/sites/entrez?"</pre>
   Db=pubmed&DbFrom=gene&Cmd=Link&LinkName=gene pubmed&LinkReadableN
   ame=PubMed& IdsFromResult=25386" title="See all 93 citations in Pubmed">See
   all (93) citations in PubMed</a></div></div>
311
                  <div class="generif-pubmed generif">
312
     <h3>GeneRIFs: Gene References Into Functions <a
313
   href="/projects/GeneRIF/GeneRIFhelp.html" class="whatisthis">What's a
   GeneRIF?</a></h3>
     314
       <1i>>
315
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316
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   true">AQP2 expression facilitates cell swelling or shrinkage leading to the
   activation of channels necessary to the control of cell proliferatio and
   apoptosis.</a>
        <div id="gene-popper1" class="gene-rif-popper">Title: Adaptation to
317
   alkalosis induces cell cycle delay and apoptosis in cortical collecting duct
   cells: role of Aquaporin-2.</div>
       318
      <1i>>
319
```

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   suppressible release of arginine vasopressin in rats with glucocorticoid
   deficiency. AQP2 plays a crucial role in impairment of water excretion in aged
   rats with glucocorticoid deficiency.</a>
         <div id="gene-popper2" class="gene-rif-popper">Title: Vasopressin-dependent
   upregulation of aquaporin-2 gene expression in aged rats with glucocorticoid
   deficiency.</div>
       322
       <1i>>
323
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324
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   true">These results demonstrate that NSAIDs decrease AQP2 protein abundance,
   particularly during adaptation during dehydration. </a>
         <div id="gene-popper3" class="gene-rif-popper">Title: Dehydration-induced
325
   increase in aquaporin-2 protein abundance is blocked by nonsteroidal anti-
   inflammatory drugs.</div>
       326
       <1i>>
327
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328
   config="isTriggerElementCloseClick: false, closeAnimation: 'none', openAnimation
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   true">The results indicate that COX-2 inhibition does not mimic ANG II receptor
   (AT1R) blockade-mediated effects and that AT1R-mediated AQP2 regulation in the
   postobstructed kidney collecting duct is independent of COX-2 induction.</a>
         <div id="gene-popper4" class="gene-rif-popper">Title: Cyclooxygenase 2
   inhibition exacerbates AQP2 and pAQP2 downregulation independently of V2 receptor
   abundance in the postobstructed kidney.</div>
       330
       <1i>>
331
         <a href="/pubmed/20089674" target=" blank" class="jig-ncbipopper"</pre>
332
   config="isTriggerElementCloseClick: false, closeAnimation: 'none', openAnimation
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   true">These studies suggest that Ser269 phosphorylation may be a more consistent
   indicator of vasopressin action and AQP2 membrane abundance than is Ser256
   phosphorylation.</a>
         <div id="gene-popper5" class="gene-rif-popper">Title: Quantitative analysis
333
   of aquaporin-2 phosphorylation.</div>
       334
       <1i>>
335
         <a href="/pubmed/18419953" target=" blank" class="jig-ncbipopper"</pre>
336
   config="isTriggerElementCloseClick: false, closeAnimation: 'none', openAnimation
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   true">Circulatory arrest led to down regulation of renal AQP2 expression.</a>
         <div id="gene-popper6" class="gene-rif-popper">Title: [Expression of renal
337
   aquaporin 2 after circulatory arrest]</div>
       338
       <1i>>
339
         <a href="/pubmed/19794145" target=" blank" class="jig-ncbipopper"</pre>
340
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   true">FAPP2 is necessary to generate AQP2-bearing vesicles at trans-Golgi that
   will undergo phosphorylation by protein kinase A in subapical regions.</a>
         <div id="gene-popper7" class="gene-rif-popper">Title: FAPP2 is required for
341
```

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aquaporin-2 apical sorting at trans-Golgi network in polarized MDCK cells.</div>
       342
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343
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   config="isTriggerElementCloseClick: false, closeAnimation: 'none', openAnimation
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   true">Increased abundance of inner medulla aquaporin-2 (AQP2) and AQP2
   phosphorylated at Ser(256) (p-AQP2) in heart failure.</a>
         <div id="gene-popper8" class="gene-rif-popper">Title: Changes of renal
345
   AQP2, ENaC, and NHE3 in experimentally induced heart failure: response to
   angiotensin II AT1 receptor blockade.</div>
       346
       <1i>>
347
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348
   config="isTriggerElementCloseClick: false, closeAnimation: 'none', openAnimation
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   true">AQP2 translocation is largely decreased by metabolic acidosis even with
   increased expression in the collecting ducts.</a>
         <div id="gene-popper9" class="gene-rif-popper">Title: Acute and chronic
349
   metabolic acidosis interferes with aquaporin-2 translocation in the rat kidney
   collecting ducts.</div>
       350
       <1i>>
351
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352
   config="isTriggerElementCloseClick: false, closeAnimation: 'none', openAnimation
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   true">In sirolimus-treated animals, AQP2 expression was reduced and expression of
   TRPM6 was increased.</a>
         <div id="gene-popper10" class="gene-rif-popper">Title: Rosiglitazone
353
   prevents sirolimus-induced hypomagnesemia, hypokalemia, and downregulation of
   NKCC2 protein expression.</div>
       354
     355
     <div class="submit-genrif">
356
       <span>Submit:</span>
357
       <a href="/projects/GeneRIF/GeneRIF.cgi?</pre>
358
   lid=25386&sym=Aqp2&name=aquaporin 2 (collecting duct)&org=Rattus
   norvegicus&url=/gene/25386">New GeneRIF</a>
359
       <a href="/RefSeg/update.cgi?</pre>
   geneid=25386&symbol=Aqp2;task=fixpub">Correction</a>
       <a href="?db=gene&amp;report=GeneRif&amp;term=25386" class="seeall-</pre>
360
   generif">See all (63)</a>
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361
   </div>
362
363
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364
   </div>
365
366
367
368
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369
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371
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         <span>Help</span>
373
```

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374
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375
       <span>top of page</span>
376
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377
    </div>
378
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379
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380
       <span class="ui-ncbitoggler-master-text">Interactions</span>
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382
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384
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386
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388
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389
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390
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            Pubs
394
            Description
395
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402
            403
            <a href="/gene/81822">Actb</a> 
404
            <a href=""></a> 
405
            <a href="http://bind.ca/Action?</pre>
406
  idsearch=183539">BIND</a> 
            407
              <a title="PubMed ID 15336526" href="/pubmed/15336526">PubMed</a>
408
            409
410
            AOP2 interacts with beta-actin. 
          411
         412
       413
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414
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415
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416
417
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418
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419
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420
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     <span>Help</span>
421
    </a>
422
    <a href="#gene-top" title="Go to the top of the page" class="genefulltop">
423
     <span>top of page</span>
424
    </a>
425
  </div><h2 class="secttitle">
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427
       <span class="ui-ncbitoggler-master-text">General gene information
428
     </a>
429
   </h2>
430
431
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432
                    <div class="gene-markers infosec">
433
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434
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435
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436
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437
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438
                            <a href="http://www.ncbi.nlm.nih.gov/genome/sts/sts.cgi?</pre>
439
   uid=119697">UniSTS:119697</a></dd>
       <dt><strong>Aqp2</strong> (e-PCR), detects polymorphism</dt>
440
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441
                            <a href="http://www.ncbi.nlm.nih.gov/genome/sts/sts.cgi?</pre>
442
   uid=209563">UniSTS:209563</a></dd>
       <dt><strong>RH134997</strong> (e-PCR)</dt>
443
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444
                            <a href="http://www.ncbi.nlm.nih.gov/genome/sts/sts.cgi?</pre>
445
   uid=218274">UniSTS:218274</a></dd>
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450
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     452
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453
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454
   Aqp2 SNP
                                                                               Geneview
455
   Report </a>
       456
       \langle 1i \rangle
457
         <a href="http://www.ncbi.nlm.nih.gov/SNP/CGI/genesnpview.cgi?
458
   report=genotype&fromdb=gene&id=25386"> See Aqp2 SNP
459
                                                                               Genotype
   Report </a>
       460
     </111>
461
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463
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465
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466
   </div>
467
468
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469
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470
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471
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       <1i><a href="/sites/homologene/20137">Homologs of the Agp2 gene</a>: The Agp2
   gene is conserved in human, chimpanzee, dog, cow, mouse, A.thaliana, and
   rice.
       <a href="http://www.ncbi.nlm.nih.gov/mapview/maps.cgi?"</pre>
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  chr7&query=e%3A25386[egene id]+AND+gene[obj type]&QSTR=aqp2&cmd=focus
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475
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480
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481
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482
483
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484
  rno04962+25386">04962</a>
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485
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487
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497
           Function
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           Evidence Code
499
           Pubs
500
         501
       </thead>
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       503
         504
           505
506
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  view=details&depth=1&query=30165">PDZ domain binding</a>
           507
            IPI
508
           <a
509
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         512
           513
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516
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517
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         \langle t.r \rangle
520
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        525
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      527
       \langle t.r \rangle
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        529
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530
  view=details&depth=1&query=15168">glycerol transmembrane transporter
  activity</a>
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         ISO
532
        533
                 534
       535
       536
        537
         <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?
538
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540
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546
  view=details&depth=1&query=5215">transporter activity</a>
547
         IEA
548
        549
                 550
       551
552
       \langle t.r \rangle
        553
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554
  view=details&depth=1&query=15250">water channel activity</a>
        555
         ISO
556
        557
                 558
       559
       \langle t.r \rangle
560
        561
         <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?</pre>
562
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         TAS
564
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565
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  activity</a>
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573
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       575
       576
        577
         <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?</pre>
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  activity</a>
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         ISO
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614
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        621
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622
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      628
        629
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  view=details&depth=1&query=71280">cellular response to copper ion</a>
        631
         IEA
632
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                634
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      636
        637
         <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?
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644
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646
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654
  view=details&depth=1&query=71288">cellular response to mercury ion</a>
655
         ISO
656
        657
                658
      659
      660
        661
         <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?</pre>
662
  view=details&depth=1&query=42631">cellular response to water
```

```
deprivation</a>
       663
         IDA
664
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665
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      668
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         <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?</pre>
670
 view=details&depth=1&query=42631">cellular response to water
 deprivation</a>
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         ISO
672
        673
                674
      675
      676
        677
         <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?
678
  view=details&depth=1&query=7565">female pregnancy</a>
        679
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680
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681
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683
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         <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?"
686
 view=details&depth=1&query=15793">glycerol transport</a>
        687
         ISO
688
        689
                690
      691
      692
        693
694
         <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?
  view=details&depth=1&query=6972">hyperosmotic response</a>
        695
         IEP
696
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      700
        701
         <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?"</pre>
702
 view=details&depth=1&query=51928">positive regulation of calcium ion
  transport</a>
        703
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704
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705
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708
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710
  view=details&depth=1&query=3097">renal water transport</a>
        711
         IEA
712
        713
                 714
      715
      716
        717
         <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?
718
  view=details&depth=1&query=3097">renal water transport</a>
        719
         ISO
720
        721
                 722
      723
       724
        725
         <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?</pre>
726
  view=details&depth=1&query=51592">response to calcium ion</a>
        727
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728
        <a
729
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       732
        733
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  view=details&depth=1&query=33762">response to glucagon stimulus</a>
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         IEP
736
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737
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740
       \langle tr \rangle
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742
  view=details&depth=1&query=9725">response to hormone stimulus</a>
        743
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744
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750
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         IEP
752
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753
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  view=details&depth=1&query=9651">response to salt stress</a>
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         IEP
768
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        773
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774
  view=details&depth=1&query=42594">response to starvation</a>
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776
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788
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790
  view=details&depth=1&query=55085">transmembrane transport</a>
791
         IEA
792
        793
                 794
       795
       <t.r>
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        797
         <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?</pre>
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  view=details&depth=1&query=55085">transmembrane transport</a>
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         ISO
800
        801
```

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849
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850
        Evidence Code
851
        Pubs
852
       853
     </thead>
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858
  view=details&depth=1&query=16324">apical plasma membrane</a>
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       871
       872
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882
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892
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       \langle t.r \rangle
896
```

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 view=details&depth=1&query=31410">cytoplasmic vesicle</a>
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        909
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        913
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  view=details&depth=1&query=31410">cytoplasmic vesicle</a>
        </+d>
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916
        917
                918
919
      <t.r>
920
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922
 view=details&depth=1&query=30659">cytoplasmic vesicle membrane</a>
        923
         IEA
924
        925
                926
      927
      928
        929
930
         <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?
  view=details&depth=1&query=5769">early endosome</a>
        931
         IDA
932
        <a
933
 href="/pubmed/18843259" target=" blank" title="PubMed ID 18843259">PubMed</a>
                934
      935
      936
        937
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938
 view=details&depth=1&query=70382">exocytic vesicle</a>
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      \langle t.r \rangle
944
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945
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946
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948
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      951
      952
       953
        <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?
954
 view=details&depth=1&query=5764">lysosome</a>
955
        IDA
956
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957
 href="/pubmed/18843259" target=" blank" title="PubMed ID 18843259">PubMed</a>
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      959
      960
       961
        <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?"</pre>
962
 view=details&depth=1&query=5624">membrane fraction</a>
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963
        IEA
964
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      967
      968
       969
        <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?</pre>
970
 view=details&depth=1&query=5624">membrane fraction</a>
       971
        ISO
972
       973
               974
      975
      976
       977
978
        <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?
 view=details&depth=1&query=5886">plasma membrane</a>
       979
        IMP
980
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981
 href="/pubmed/9321919" target=" blank" title="PubMed ID 9321919">PubMed</a>
               982
      983
      984
       985
        <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?"</pre>
986
 view=details&depth=1&query=5886">plasma membrane</a>
       987
        ISO
988
       989
               990
      991
      >
992
       993
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994
  view=details&depth=1&query=43234">protein complex</a>
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          IDA
996
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997
  href="/pubmed/15823548" target=" blank" title="PubMed ID 15823548">PubMed</a>
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       999
       \langle t.r \rangle
1000
        1001
          <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?
1002
  view=details&depth=1&query=55037">recycling endosome</a>
1003
          IEA
1004
1005
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       <t.r>
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          <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?
1010
  view=details&depth=1&query=55037">recycling endosome</a>
        1011
         ISO
1012
        1013
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1014
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1016
       1017
          <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?"
1018
  view=details&depth=1&query=5791">rough endoplasmic reticulum</a>
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1021
  href="/pubmed/15905145" target=" blank" title="PubMed ID 15905145">PubMed</a>
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       1024
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1026
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  view=details&depth=1&query=5802">trans-Golgi network</a>
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1028
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       1031
       1032
        1033
          <a href="http://amigo.geneontology.org/cgi-bin/amigo/go.cgi?</pre>
1034
  view=details&depth=1&query=30133">transport vesicle</a>
        1035
          IDA
1036
        <a
1037
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                  1038
       1039
      1040
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1041
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1046
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1047
1048
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1049
      <a id="geneGeneral protein info"></a>
1050
      <div class="tophelp">
1051
        <a href="/bookshelf/br.fcgi?</pre>
1052
    book=helpgene&part=EntrezGene#EntrezGene.General Protein Information"
    title="Help" class="genefullhelp">
          <span>Help</span>
1053
        </a>
1054
        <a href="#gene-top" title="Go to the top of the page" class="genefulltop">
1055
          <span>top of page</span>
1056
        </a>
1057
      </div>
1058
      <h2 class="secttitle">
1059
        <a class="jig-ncbitoggler-open">
1060
          <span class="ui-ncbitoggler-master-text">General protein information/span>
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1062
        </a>
      </h2>
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        </d1>
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1069
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1071
          <dd>AQP-CD</dd>
1072
          <dd>WCH-CD</dd>
1073
          <dd>aquaporin-CD</dd>
1074
          <dd>ADH water channel</dd>
1075
          <dd>collecting duct water channel protein</dd>
1076
1077
          <dd>water channel protein for renal collecting duct</dd>
        </dl>
1078
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1079
    </div>
1080
1081
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1082
      <a id="geneReference sequences"></a>
1083
      <div class="tophelp">
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1085
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    title="Help" class="genefullhelp">
           <span>Help</span>
1086
1087
        <a href="#gene-top" title="Go to the top of the page" class="genefulltop">
1088
          <span>top of page</span>
1089
        </a>
1090
      </div>
1091
      <h2 class="secttitle">
1092
        <a class="jig-ncbitoggler-open">
1093
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10/29/2010

1131

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10/29/2010
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1132
         The following sections contain reference sequences that
1133
    belong to a
                    specific genome build. <a id="expl-genomes"
1134
    href="#">Explain</a>
        This section includes genomic
1135
    Reference
                Sequences (RefSeqs) from all assemblies on which this gene is
1136
    annotated, such as RefSeqs
                for chromosomes and scaffolds (contigs) from both reference and
1137
    alternate assemblies.
                Model RNAs and proteins are also reported here.
1138
        <h3>Reference assembly (based on RGSC v3.4)</h3>
1139
        <h4>Genomic </h4>
1140
1141
        <01>
          <1i>>
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              <dt>Download</dt>
1147
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1149
    from=138325855&to=138330891&report=genbank">GenBank</a>
                <a href="/nuccore/NC 005106.2?
1150
    from=138325855&to=138330891&report=fasta"> FASTA</a>
                <a href="/nuccore/NC 005106.2?
1151
    from=138325099&to=138331645&report=graph&content=5"> Sequence Viewer
    (Graphics) </a>
              </dd>
1152
            </dl>
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          1154
          <1i>>
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1156
            <d1>
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              <dt>Download</dt>
1160
1161
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    from=5053841&to=5058877&report=fasta"> FASTA</a>
                <a href="/nuccore/NW 047784.1?
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    from=5053085&to=5059631&report=graph&content=5"> Sequence Viewer
    (Graphics) </a>
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            </dl>
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        <h3>Alternate assembly (Rn Celera) </h3>
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        <h4>Genomic </h4>
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            AC 000075.1
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1174
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1175
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10/29/2010
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               <a href="/nuccore/AC 000075.1?
1180
    from=127193026&to=127197996&report=fasta"> FASTA</a>
               <a href="/nuccore/AC 000075.1?
1181
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    (Graphics) </a>
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1193
    from=4221701&to=4226671&report=fasta"> FASTA</a>
                <a href="/nuccore/NW 001084861.1?
1194
    from=4220954&to=4227416&report=graph&content=5"> Sequence Viewer
    (Graphics) </a>
             </dd>
1195
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1196
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1197
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1199
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      <a id="geneRelated sequences"></a>
1203
      <div class="tophelp">
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        <a href="/bookshelf/br.fcgi?
1205
    book=helpgene&part=EntrezGene#EntrezGene.Related Sequences" title="Help"
    class="genefullhelp">
          <span>Help</span>
1206
        </a>
1207
        <a href="#gene-top" title="Go to the top of the page" class="genefulltop">
1208
          <span>top of page</span>
1209
        </a>
1210
      </div>
1211
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1213
1214
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        </a>
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      </h2>
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1221
              Protein
1222
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Strain
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1226
1227
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1228
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1234
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       1236
1237
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       1238
      1239
      1240

1241
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       1250
       None
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      1253
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       1255
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       1257
       1258
         <a href="/protein/6561267">AAF16871.1</a>
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       1260
1261
       Sprague-Dawley
      1262
      1263
       mRNA
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       1265
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       1268
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       1279
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10/29/2010
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          mRNA
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          1284
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          1287
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        >
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1301
          UniProtKB Link
1302
        1303
1304
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1307
          1308
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1309
1310
          1311
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1312
   Prot:P34080</a>
          1313
        1314
1315
        \langle t.r \rangle
          Q9QYA1
1316
          1317
           <a href="/protein/81907124">GenPept</a>
1318
          1319
          1320
1321
   href="http://www.uniprot.org/entry/Q9QYA1">UniProtKB/TrEMBL:Q9QYA1</a>
          1322
        1323
       1324
     1325
    </div>
1326
   </div>
1327
1328
              <div class="rprt-section gene-additional-links">
1329
        <a id="geneAdditional links"></a><div class="tophelp">
1330
    <a href="/bookshelf/br.fcgi?</pre>
1331
   book=helpgene&part=EntrezGene#EntrezGene.Additional Links" title="Help"
```

```
class="genefullhelp">
        <span>Help</span>
1332
1333
     <a href="#gene-top" title="Go to the top of the page" class="genefulltop">
1334
1335
       <span>top of page</span>
1336
   </div><h2 class="secttitle">
1337
     <a class="jig-ncbitoggler-open">
1338
       <span class="ui-ncbitoggler-master-text">Additional Links
1339
     </a>
1340
   </h2>
1341
1342
            <div class="rprt-section-body">
1343
                    <div>
1344
     <h3 class="withnote">Additional Links</h3>
1345
     1346
        UCSC <a href="http://genome.ucsc.edu/cgi-bin/hgTracks?"</pre>
1347
   org=rat&position=NM 012909">UCSC</a>
       UniGene <a href="http://www.ncbi.nlm.nih.gov/UniGene/clust.cgi?"</pre>
1348
   ORG=Rn& CID=90076">Rn.90076</a>
     1349
   </div>
1350
1351
                    <h3 class="withnote">Gene LinkOut </h3>The following <a</pre>
1352
   href="http://www.ncbi.nlm.nih.gov/projects/linkout/index.html">LinkOut</a>
   resources are supplied by external providers. These providers are
1353
                                    responsible for maintaining the links. 
     <div class="linkout">
1354
        <a class="jig-ncbitoggler-open main">
1355
          <span>Molecular Biology Databases
1356
       </a>
1357
       <u1>
1358
          <1i>>
1359
            <span class="free-rsc"></span>
1360
            <a target=" blank" href="/entrez/utils/fref.fcgi?</pre>
1361
   itool=Gene FullReport&PrId=6845&uid=25386&nlmid=&db=gene&url=
   http://www.nextbio.com/b/search/ov/Aqp2?id=606439&type=feature">NextBio</a>
1362
1363
          <span class="free-rsc"></span>Kyoto Encyclopedia of Genes and
    Genomes
         <111>
1364
            <1i>>
1365
              <a target=" blank" href="/entrez/utils/fref.fcgi?</pre>
1366
   itool=Gene FullReport&PrId=5174&uid=25386&nlmid=&db=gene&url=
   http://www.genome.jp/dbget-bin/show pathway?rno04962+25386">
                <span>Vasopressin-regulated water reabsorption</span>
1367
              </a>
1368
           1369
            \langle 1i \rangle
1370
              <a target=" blank" href="/entrez/utils/fref.fcgi?</pre>
1371
   itool=Gene FullReport&PrId=5174&uid=25386&nlmid=&db=gene&url=
   http://www.genome.jp/dbget-bin/www bget?rno:25386">
                <span>rno:25386</span>
1372
             </a>
1373
            1374
          </111>
1375
          <1i>>
1376
```

```
<a target=" blank" href="/entrez/utils/fref.fcgi?</pre>
1377
   itool=Gene FullReport&PrId=5628&uid=25386&nlmid=&db=gene&url=
   https://analysis.ingenuity.com/pa/api/v2/geneview?
   geneidtype=entrezgene&geneid=25386&applicationname=Entrez">Ingenuity
   Pathways Analysis</a>
         1378
         <1i>>
1379
           <span class="free-rsc"></span>
1380
           <a target=" blank" href="/entrez/utils/fref.fcgi?</pre>
1381
   itool=Gene FullReport&PrId=5618&uid=25386&nlmid=&db=gene&url=
   http://www.ihop-net.org/UniPub/iHOP/to?focus=IHOP&id=321485">iHOP -
   Information Hyperlinked over Proteins</a>
         1382
         <1i>>
1383
           <span class="free-rsc"></span>
1384
           <a target=" blank" href="/entrez/utils/fref.fcgi?</pre>
1385
   itool=Gene FullReport&PrId=5059&uid=25386&nlmid=&db=gene&url=
   http://biogps.gnf.org/genereport/25386/">BioGPS</a>
         1386
         <1i>>
1387
           <a target=" blank" href="/entrez/utils/fref.fcgi?</pre>
1388
   itool=Gene FullReport&PrId=7557&uid=25386&nlmid=&db=gene&url=
   https://www.genevestigator.com/gv/directlink.jsp?
   geneIDs=25386&geneIDType=Entrez Gene&source=NCBI">GENEVESTIGATOR</a>
1389
         <span class="free-rsc"></span>GeneNetwork
1390
         <l>
1391
           <1i>>
1392
             <a target=" blank" href="/entrez/utils/fref.fcgi?</pre>
1393
   itool=Gene FullReport&PrId=5746&uid=25386&nlmid=&db=gene&url=
   http://www.genenetwork.org/webgtl/WebQTL.py?
   cmd=sch&geneid=25386&species=rat">
               <span>Records for gene expression in Rat
1394
             </a>
1395
           </111>
1397
         <1i>>
1398
           <a target=" blank" href="/entrez/utils/fref.fcgi?</pre>
1399
   itool=Gene FullReport&PrId=7084&uid=25386&nlmid=&db=gene&url=
   https://portal.genego.com/cgi/gene.cgi?id=-1233852364">GeneGo</a>
         1400
         <1i>>
1401
           <span class="free-rsc"></span>
1402
           <a target=" blank" href="/entrez/utils/fref.fcgi?</pre>
1403
   itool=Gene FullReport&PrId=5380&uid=25386&nlmid=&db=gene&url=
   http://natural.salk.edu/cgi-bin/creb?
   DB=rat& TABLE=Rat CRE Prediction& FIELD=LocusLink& QUERY=25386">CREB
   Target Gene Database</a>
         1404
       1405
     </div>
1406
     <div class="linkout">
1407
       <a class="jig-ncbitoggler-open main">
1408
         <span>Research Materials</span>
1409
       </a>
1410
       <111>
1411
         ExactAntigen/Labome
1412
```

```
10/29/2010
                             view-source:www.ncbi.nlm.nih.gov/sit...
          <u1>
1413
            <1i>>
1414
              <a target=" blank" href="/entrez/utils/fref.fcgi?</pre>
1415
    itool=Gene_FullReport&PrId=5753&uid=25386&nlmid=&db=gene&url=
    http://www.labome.com/review/gene/rat/aquaporin-2-antibody-all-methods.html">
                <span>antibody review</span>
1416
              </a>
1417
            1418
            <1i>>
1419
              <a target=" blank" href="/entrez/utils/fref.fcgi?</pre>
1420
    itool=Gene FullReport&PrId=5753&uid=25386&nlmid=&db=gene&url=
    http://www.labome.com/gene/rat/aguaporin-2-protein.html">
                <span>protein and peptide</span>
1421
              </a>
1422
            1423
            <1i>>
1424
              <a target=" blank" href="/entrez/utils/fref.fcgi?</pre>
1425
    itool=Gene FullReport&PrId=5753&uid=25386&nlmid=&db=gene&url=
    http://www.labome.com/gene/rat/aquaporin-2-cDNA.html">
                <span>cDNA clone/miRNA-related clone</span>
1426
              </a>
1427
            1428
            <1i>>
1429
              <a target=" blank" href="/entrez/utils/fref.fcgi?</pre>
1430
    itool=Gene FullReport&PrId=5753&uid=25386&nlmid=&db=gene&url=
    http://www.labome.com/gene/rat/aquaporin-2-antibody.html">
1431
                <span>antibody</span>
              </a>
1432
            1433
          </111>
1434
          antibodies-online
1435
          <u1>
1436
            <1i>>
1437
              <a target=" blank" href="/entrez/utils/fref.fcgi?</pre>
1438
    itool=Gene FullReport&PrId=6563&uid=25386&nlmid=&db=gene&url=
    http://www.antibodies-online.com/antigen/Aquaporin%202%20(AQP2)/">
                <span>anti-Aquaporin 2 (AQP2) antibodies/span>
1439
              </a>
1440
1441
            1442
        1443
      </div>
1444
      <div class="linkout">
1445
        <a class="jig-ncbitoggler main">
1446
          <span>Miscellaneous</span>
1447
        </a>
1448
        <u1>
1449
          <span class="free-rsc"></span>Reactome
1450
          <111>
1451
            <1i>>
1452
              <a target=" blank" href="/entrez/utils/fref.fcgi?</pre>
1453
    itool=Gene FullReport&PrId=4914&uid=25386&nlmid=&db=gene&url=
    http://www.reactome.org/cgi-bin/link?SOURCE=UniProt&ID=P34080">
                <span>Reactome Entity:P34080</span>
1454
              </a>
1455
            1456
          </111>
1457
```

<1i>>

1502

1503

```
10/29/2010
                              view-source:www.ncbi.nlm.nih.gov/sit...
          <a href="#geneInteractions">Interactions</a>
1504
        1505
        <1i>>
1506
          <a href="#geneGeneral gene info">General gene info</a>
1507
1508
        <1i>>
1509
          <a href="#geneGeneral protein info">General protein info</a>
1510
        1511
        <1i>>
1512
          <a href="#geneReference sequences">Reference sequences</a>
1513
        1514
        <1i>>
1515
          <a href="#geneRelated sequences">Related sequences</a>
1516
        1517
        <1i>>
1518
          <a href="#geneAdditional links">Additional links</a>
1519
        1520
      1521
    </div>
1522
    </div>
1523
1524
            <div class="portlet brieflink">
1525
      <div class="portlet head">
1526
        <div class="portlet title">
1527
          <h3>Links</h3>
1528
        </div>
1529
1530
        <a
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene RVFullReport.Gene RightCo
    lumn.Gene LinksOne.Shutter" sid="1" href="#" class="portlet shutter"
    title="Show/hide content" remembercollapsed="true" pgsec name="Gene LinksOne"
    id="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene RVFullReport.Gene RightColu
    mn.Gene LinksOne.Shutter"></a>
1531
      </div>
      <div class="portlet content">
1532
      <u1>
1533
        \langle 1i \rangle
1534
          <a href="/genome/clone/orderclone.cgi?db=gene&amp;uid=25386">Order cDNA
1535
    clone</a>
1536
        </1i>
        <1i>>
1537
          <a href="/sites/entrez?</pre>
1538
    Db=biosystems&DbFrom=gene&Cmd=Link&LinkName=gene biosystems&LinkR
    eadableName=BioSystems&IdsFromResult=25386">BioSystems</a>
        1539
        <1i>>
1540
          <a href="/sites/entrez?</pre>
1541
    Db=cdd&DbFrom=gene&Cmd=Link&LinkName=gene cdd&LinkReadableName=Co
    nserved%20Domains&IdsFromResult=25386">Conserved Domains</a>
        1542
        <1i>>
1543
          <a href="/sites/entrez?</pre>
1544
    Db=pmc&DbFrom=gene&Cmd=Link&LinkName=gene pmc&LinkReadableName=Fu
    11%20text%20in%20PMC&IdsFromResult=25386">Full text in PMC</a>
        <1i>>
1546
          <a href="/sites/entrez?</pre>
1547
    Db=geoprofiles&DbFrom=gene&Cmd=Link&LinkName=gene geoprofiles&Lin
```

```
kReadableName=GEO%20Profiles&IdsFromResult=25386">GEO Profiles</a>
       1548
       <1i>>
1549
         <a href="/sites/entrez?</pre>
1550
   Db=genome&DbFrom=gene&Cmd=Link&LinkName=gene genome&LinkReadableN
   ame=Genome&IdsFromResult=25386">Genome</a>
       1551
       <1i>>
1552
         <a href="/sites/entrez?</pre>
1553
   Db=homologene&DbFrom=gene&Cmd=Link&LinkName=gene homologene&LinkR
   eadableName=HomoloGene& IdsFromResult=25386">HomoloGene</a>
       1554
       <1i>>
1555
         <a href="/mapview/map search.cgi?
1556
   direct=on&idtype=gene&id=25386">Map Viewer</a>
       1557
       <1i>>
1558
         <a href="/sites/entrez?</pre>
1559
   Db=nuccore&DbFrom=gene&Cmd=Link&LinkName=gene nuccore&LinkReadabl
   eName=Nucleotide&IdsFromResult=25386">Nucleotide</a>
       1560
       <1i>>
1561
         <a href="/sites/entrez?</pre>
1562
   Db=omia&DbFrom=gene&Cmd=Link&LinkName=gene omia&LinkReadableName=
   OMIA& IdsFromResult=25386">OMIA</a>
       1563
       <1i>>
1564
         <a href="/sites/entrez?</pre>
1565
   Db=probe&DbFrom=gene&Cmd=Link&LinkName=gene probe&LinkReadableNam
   e=Probe& IdsFromResult=25386">Probe</a>
       1566
       <1i>>
1567
         <a href="/sites/entrez?</pre>
1568
   Db=protein&DbFrom=gene&Cmd=Link&LinkName=gene protein&LinkReadabl
   eName=Protein&IdsFromResult=25386">Protein</a>
       </1i>
1569
       <1i>>
1570
         <a href="/sites/entrez?</pre>
1571
   Db=pccompound& DbFrom=gene& Cmd=Link& LinkName=gene pccompound& LinkR
   eadableName=PubChem%20Compound&IdsFromResult=25386">PubChem Compound</a>
       1572
       <1i>>
1573
         <a href="/sites/entrez?</pre>
1574
   Db=pcsubstance&DbFrom=gene&Cmd=Link&LinkName=gene pcsubstance&Lin
   kReadableName=PubChem%20Substance&IdsFromResult=25386">PubChem Substance</a>
       1575
       <1i>
1576
         <a href="/sites/entrez?</pre>
1577
   Db=pubmed&DbFrom=gene&Cmd=Link&LinkName=gene pubmed&LinkReadableN
   ame=PubMed& IdsFromResult=25386">PubMed</a>
       1578
       <1i>>
1579
         <a href="/sites/entrez?</pre>
1580
   Db=pubmed& DbFrom=gene& Cmd=Link& LinkName=gene pubmed rif& LinkReada
   bleName=PubMed%20(GeneRIF)&IdsFromResult=25386">PubMed (GeneRIF)</a>
       1581
       <1i>>
1582
```

```
<a href="/sites/entrez?
1583
   Db=protein&DbFrom=gene&Cmd=Link&LinkName=gene protein refseg&Link
   ReadableName=RefSeq%20Proteins&IdsFromResult=25386">RefSeq Proteins</a>
       1584
       <1i>>
1585
         <a href="/sites/entrez?</pre>
1586
   Db=nuccore&DbFrom=gene&Cmd=Link&LinkName=gene nuccore refsegrna&L
   inkReadableName=RefSeq%20RNAs&IdsFromResult=25386">RefSeq RNAs</a>
       1587
       <1i>>
1588
         <a href="/sites/entrez?</pre>
1589
   Db=snp&DbFrom=gene&Cmd=Link&LinkName=gene snp&LinkReadableName=SN
   P& IdsFromResult=25386">SNP</a>
       1590
       <1i>>
1591
         <a href="http://www.ncbi.nlm.nih.gov/SNP/snp ref.cgi?locusId=25386">SNP:
1592
   GeneView</a>
       1593
       <1i>>
1594
         <a href="http://www.ncbi.nlm.nih.gov/SNP/CGI/genesnpview.cgi?
1595
   report=genotype&fromdb=gene&id=25386">SNP: Genotype</a>
       1596
       <1i>>
1597
         <a href="/sites/entrez?</pre>
1598
   Db=taxonomy&DbFrom=gene&Cmd=Link&LinkName=gene taxonomy&LinkReada
   bleName=Taxonomy&IdsFromResult=25386">Taxonomy</a>
       1599
       <1i>>
1600
         <a href="/sites/entrez?
1601
   Db=unists&DbFrom=gene&Cmd=Link&LinkName=gene unists&LinkReadableN
   ame=UniSTS&IdsFromResult=25386">UniSTS</a>
       1602
       <1i>>
1603
         <a href="/sites/entrez?
1604
   Db=unigene&DbFrom=gene&Cmd=Link&LinkName=gene unigene&LinkReadabl
   eName=UniGene& IdsFromResult=25386">UniGene</a>
       1605
     1606
   </div>
1607
   </div>
1608
1609
           <div class="portlet brieflink">
1610
     <div class="portlet head">
1611
       <div class="portlet title">
1612
         <h3>Links to external resources</h3>
1613
       </div>
1614
1615
   name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene RVFullReport.Gene RightCo
   lumn.Gene LinksTwo.Shutter" sid="1" href="#" class="portlet shutter"
   title="Show/hide content" remembercollapsed="true" pgsec name="Gene LinksTwo"
   id="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene RVFullReport.Gene RightColu
   mn.Gene LinksTwo.Shutter"></a>
     </div>
1616
     <div class="portlet content">
1617
     <111>
1618
       <1i>>
1619
         <a href="http://rgd.mcw.edu/generalSearch/RgdSearch.jsp?"
1620
```

```
quickSearch=1& searchKeyword=2142">RGD</a>
        1621
        <1i>>
1622
          <a href="http://www.ensembl.org/id/ENSRNOG0000000297">Ensembl</a>
1623
1624
        <1i>>
1625
          <a href="http://ratmap.gen.gu.se/ShowSingleLocus.htm?"</pre>
1626
    accno=41271">RATMAP</a>
        1627
        <1i>>
1628
          <a href="http://www.ncbi.nlm.nih.gov/sutils/evv.cgi?"</pre>
1629
    taxid=10116&contig=NW 047784.1&gene=Aqp2&lid=25386&from=5053840&a
    mp; to=5058876">Evidence Viewer</a>
        1630
        <1i>>
1631
          <a href="http://www.ncbi.nlm.nih.gov/mapview/modelmaker.cgi?</pre>
1632
    taxid=10116&contig=NW 047784.1&from=5053840&to=5058876&gene=Agp2&
    amp;lid=25386">ModelMaker</a>
        1633
        <1i>>
1634
          <a href="http://genome.ucsc.edu/cgi-bin/hgTracks?"</pre>
1635
    org=rat&position=NM 012909">UCSC</a>
        1636
        <1i>>
1637
          <a href="http://mgc.nci.nih.gov/Genes/CloneList?">http://mgc.nci.nih.gov/Genes/CloneList?
1638
    ORG=Rn&LIST=BC128705">MGC</a>
        1639
        <1i>>
1640
          <a href="http://www.genome.jp/dbget-bin/www bget?rno:25386">KEGG</a>
1641
        1642
      1643
    </div>
1644
    </div>
1645
1646
            <div class="portlet brieflink">
1647
      <div class="portlet head">
1648
        <div class="portlet title">
1649
          <h3>General information</h3>
1650
1651
        </div>
        <a
1652
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene RVFullReport.Gene RightCo
    lumn.Gene GeneralInfo.Shutter" sid="1" href="#" class="portlet shutter"
    title="Show/hide content" remembercollapsed="true" pgsec name="Gene GeneralInfo"
    id="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene RVFullReport.Gene RightColu
    mn.Gene GeneralInfo.Shutter"></a>
      </div>
1653
      <div class="portlet content">
1654
      <111>
1655
        \langle 1i \rangle
1656
          <a href="http://www.pubmedcentral.nih.gov/articlerender.fcgi?
1657
    tool=pubmed&pubmedid=15608257">About Entrez Gene</a>
        1658
        <1i>>
1659
          <a href="http://www.ncbi.nlm.nih.gov/bookshelf/br.fcgi?"</pre>
    book=helpgene&part=genefag">FAQ</a>
        1661
        <1i>>
1662
```

```
10/29/2010
                                view-source:www.ncbi.nlm.nih.gov/sit...
           <a href="ftp://ftp.ncbi.nlm.nih.gov/gene/">FTP site</a>
1663
         1664
         \langle 1i \rangle
1665
           <a href="http://www.ncbi.nlm.nih.gov/bookshelf/br.fcgi?"</pre>
1666
    book=helpgene&part=EntrezGene">Help</a>
1667
         <1i>>
1668
           <a href="http://www.ncbi.nlm.nih.gov/books/bv.fcgi?"</pre>
1669
     rid=handbook.chapter.ch19">NCBI Handbook</a>
         1670
         <1i>>
1671
1672
    href="http://www.ncbi.nlm.nih.gov/projects/Gene/gentrez stats.cgi">Statistics</a>
         1673
         <1i>>
1674
           <a href="http://www.ncbi.nlm.nih.gov/books/bv.fcgi?"</pre>
1675
    rid=helpmyncbi.chapter.MyNCBI">My NCBI help</a>
1676
       1677
    </div>
1678
    </div>
1679
1680
             <div class="portlet brieflink">
1681
      <div class="portlet head">
1682
         <div class="portlet title">
1683
           <h3>Related sites</h3>
1684
         </div>
1685
1686
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene RVFullReport.Gene RightCo
    lumn.Gene RelatedSites.Shutter" sid="1" href="#" class="portlet shutter"
    title="Show/hide content" remembercollapsed="true" pgsec name="Gene RelatedSites"
    id="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene RVFullReport.Gene RightColu
    mn.Gene RelatedSites.Shutter"></a>
      </div>
1687
      <div class="portlet content">
1688
       <111>
1689
         <1i>>
1690
           <a href="http://www.ncbi.nlm.nih.gov/BLAST">BLAST</a>
1691
1692
         <1i>>
1693
           <a href="http://www.ncbi.nlm.nih.gov/portal/query.fcgi?</pre>
1694
     p$site=entrez&DB=genome">Entrez Genome</a>
         1695
         <1i>>
1696
           <a href="http://www.ncbi.nlm.nih.gov/portal/query.fcgi?</pre>
1697
    p$site=entrez&db=genomeprj">Genome Project</a>
         1698
         \langle 1i \rangle
1699
           <a href="http://www.ncbi.nlm.nih.gov/Genomes">Genomic Biology</a>
1700
         1701
1702
           <a href="http://www.ncbi.nlm.nih.gov/projects/geo/">GEO</a>
1703
         1704
         <1i>>
1705
           <a href="http://www.ncbi.nlm.nih.gov/portal/query.fcgi?</pre>
1706
    p$site=entrez&db=homologene">HomoloGene</a>
         1707
```

```
10/29/2010
                               view-source:www.ncbi.nlm.nih.gov/sit...
        <1i>>
1708
           <a href="http://www.ncbi.nlm.nih.gov/mapview/">Map Viewer</a>
1709
        1710
        <1i>>
1711
           <a href="http://www.ncbi.nlm.nih.gov/portal/query.fcgi?</pre>
1712
    p$site=entrez&db=OMIM">OMIM</a>
        1713
        <1i>>
1714
           <a href="http://www.ncbi.nlm.nih.gov/portal/query.fcgi?</pre>
1715
    p$site=entrez&DB=probe">Probe</a>
        1716
         <1i>>
1717
           <a href="http://www.ncbi.nlm.nih.gov/RefSeq/">RefSeq</a>
1718
        1719
1720
        <1i>>
           <a href="http://www.ncbi.nlm.nih.gov/portal/query.fcgi?"</pre>
1721
    p$site=entrez&db=unigene">UniGene</a>
        1722
        <1i>>
1723
           <a href="http://www.ncbi.nlm.nih.gov/portal/guery.fcgi?</pre>
1724
    p$site=entrez&DB=unists">UniSTS</a>
         1725
      </111>
1726
    </div>
1727
    </div>
1728
1729
1730
             <div class="portlet brieflink">
      <div class="portlet head">
1731
        <div class="portlet title">
1732
           <h3>Feedback</h3>
1733
        </div>
1734
1735
        <a
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene RVFullReport.Gene RightCo
    lumn.Gene Feedback.Shutter" sid="1" href="#" class="portlet shutter"
    title="Show/hide content" remembercollapsed="true" pgsec name="Gene Feedback"
    id="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene RVFullReport.Gene RightColu
    mn.Gene Feedback.Shutter"></a>
      </div>
1736
1737
      <div class="portlet content">
      <u1>
1738
1739
           <a href="mailto:info@ncbi.nlm.nih.gov?subject=Gene">Contact Help Desk</a>
1740
        1741
1742
           <a href="http://www.ncbi.nlm.nih.gov/RefSeq/update.cgi?"</pre>
1743
    geneid=25386&symbol=Agp2">Submit Correction</a>
        1744
        <1i>>
1745
           <a href="http://www.ncbi.nlm.nih.gov/projects/GeneRIF/GeneRIF.cgi?</pre>
1746
    lid=25386%amp;sym=Aqp2%amp;name=aquaporin 2 (collecting duct)%amp;org=Rattus
    norvegicus&url=/gene/25386">Submit GeneRIF</a>
        1747
      1748
    </div>
1749
    </div>
1750
```

<div class="portlet brieflink">

1751

1752

```
<div class="portlet head">
1753
        <div class="portlet title">
1754
          <h3>Subscription</h3>
1755
        </div>
1756
1757
        <a
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene RVFullReport.Gene RightCo
    lumn.Gene Subscription.Shutter" sid="1" href="#" class="portlet shutter"
    title="Show/hide content" remembercollapsed="true" pgsec name="Gene Subscription"
    id="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.Gene RVFullReport.Gene RightColu
    mn.Gene Subscription.Shutter"></a>
      </div>
1758
      <div class="portlet content">
1759
      <u1>
1760
        <1i>>
1761
          <a href="http://www.ncbi.nlm.nih.gov/mailman/listinfo/refseg-
1762
    announce">RefSeq</a>
        1763
        <1i>>
1764
          <a href="http://www.ncbi.nlm.nih.gov/mailman/listinfo/gene-
1765
    announce">Gene</a>
        1766
        <1i>>
1767
          <a href="http://www.ncbi.nlm.nih.gov/mailman/listinfo/mapview-announce">Map
1768
    Viewer</a>
        1769
      1770
    </div>
1771
    </div>
1772
1773
    </div>
1774
1775
            <component id="Gene RVFullReport.Gene RightColMenuLinks"/>-->
    <!--
1776
            <div class="portlet">
1777
      <div class="portlet head">
1778
        <div class="portlet title">
1779
          <h3>Recent activity</h3>
1780
        </div>
1781
        <a name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.HistoryDisplay.Shutter"</pre>
1782
    sid="1" href="#" class="portlet shutter" title="Show/hide content"
    remembercollapsed="true" pgsec name="recent activity"
    id="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.HistoryDisplay.Shutter"></a>
      </div>
1783
      <div class="portlet content">
1784
        <div id="HTDisplay" class="">
1785
          <input
1786
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.HistoryDisplay.Cmd" sid="1"
    type="hidden" />
          <div class="action">
1787
1788
    name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.HistoryDisplay.ClearHistory"
    realname="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.HistoryDisplay.ClearHistor
    y" cmd="ClearHT" href="?cmd=ClearHT&" onclick="return false;"
    id="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.HistoryDisplay.ClearHistory">
                                     Clear
1789
                                 </a>
1790
            <a
1791
```

```
name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.HistoryDisplay.HistoryToggle"
   sid="1"
   realname="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.HistoryDisplay.HistoryTogg
   le" class="HTOn" cmd="HTOff" href="?cmd=HTOff&" onclick="return false;"
   id="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.HistoryDisplay.HistoryToggle">
                                   Turn Off
1792
                               </a>
1793
1794
   name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.HistoryDisplay.HistoryToggle"
   sid="2"
   realname="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.HistoryDisplay.HistoryTogg
   le" class="HTOff" cmd="HTOn" href="?cmd=HTOn&" onclick="return false;"
   id="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.HistoryDisplay.HistoryToggle">
                                  Turn On
1795
                               </a>
1796
         </div>
1797
         ul id="activity">
1798
           1799
             <a class="htb ralinkpopperctrl" ref="log$=activity"</pre>
1800
   href="/portal/utils/pageresolver.fcgi?recordid=1288364159219586">Agp2 aguaporin 2
    (collecting duct) [Rattus norvegicus]</a>
             <div class="ralinkpop offscreen noflow">Aqp2 aquaporin 2 (collecting
1801
   duct) [Rattus norvegicus] < div class="brieflinkpopdesc" > Gene ID: 25386 < / div > < / div >
             <div class="tertiary">Gene</div>
1802
           1803
           1804
             <a class="htb ralinkpopperctrl" ref="log$=activity"</pre>
1805
   href="/portal/utils/pageresolver.fcgi?recordid=1288364151673318">aquaporin-2
   [Rattus norvegicus]</a>
             <div class="ralinkpop offscreen noflow">aquaporin-2 [Rattus
1806
   norvegicus] < div class = "brieflinkpopdesc" > gi | 77539434 | ref | NP 037041.2 | < / div > < / div >
             <div class="tertiary">Protein</div>
1807
           1808
           1809
             <a class="htb" ref="log$=activity"</pre>
1810
   href="/portal/utils/pageresolver.fcgi?recordid=1288364147727983">agp2 rat <span
   class="number">(17)</span></a>
             <div class="tertiary">Protein</div>
1811
1812
         1813
         Your browsing activity is empty.
1814
         Activity recording is turned off.
1815
         1816
1817
   name="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.HistoryDisplay.HistoryOn"
   realname="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.HistoryDisplay.HistoryOn"
   cmd="HTOn" href="?cmd=HTOn&" onclick="return false;"
   id="EntrezSystem2.PEntrez.Gene.Gene ResultsPanel.HistoryDisplay.HistoryOn">Turn
   recording back on</a>
1818
         <a class="seemore" href="/sites/myncbi/recentactivity">See more...</a>
1819
       </div>
1820
     </div>
   </div>
1822
1823
1824 </div>
```

1854

<h3>Popular</h3>

```
10/29/2010
                           view-source:www.ncbi.nlm.nih.gov/sit...
               <a href="/pubmed/">PubMed</a>
1855
               <a href="/nucleotide/">Nucleotide</a>
1856
               <a href="http://blast.ncbi.nlm.nih.gov/">BLAST</a>
1857
               <a href="http://www.pubmedcentral.nih.gov/"</pre>
1858
    class="newdomain">PubMed Central</a>
               <a href="/gene/">Gene</a>
1859
               <a href="/books/">Bookshelf</a>
1860
               <a href="/protein/">Protein</a>
1861
               <a href="/omim/">OMIM</a>
1862
               <a href="/genome/">Genome</a>
1863
               <a href="/snp/">SNP</a>
1864
               <a href="/Structure/">Structure</a>
1865
           1866
           1867
               <h3>Featured</h3>
1868
               <a href="/Genbank/">GenBank</a>
1869
               <a href="/refseq/">Reference Sequences</a>
1870
               <a href="/mapview/">Map Viewer</a>
1871
               <a href="/genomeprj">Genome Projects</a>
1872
               <a href="/genome/quide/human/">Human Genome</a>
1873
               <a href="/genome/guide/mouse/">Mouse Genome</a>
1874
               <a href="/genomes/FLU/">Influenza Virus</a>
1875
               <a href="/tools/primer-blast/">Primer-BLAST</a>
1876
               <a href="/Traces/sra/">Sequence Read Archive</a>
1877
1878
           1879
1880
               <h3>NCBI Information</h3>
               <a href="/About/">About NCBI</a>
1881
               <a href="/CBBresearch/">Research at NCBI</a>
1882
               <a href="/bookshelf/br.fcgi?book=newsncbi">NCBI
1883
    Newsletter</a>
               <a href="/Ftp/">NCBI FTP Site</a>
1884
           1885
        </div>
1886
1887
1888
       <div id="ncbifooter" class="contact info">
1889
           <div id="footer-contents-right">
1890
1891
               <a href="http://www.nih.gov" title="NIH" class="nih img link</pre>
    newdomain">NIH</a>
               <a href="http://www.dhhs.gov" title="DHHS" class="dhhs img link</pre>
1892
    newdomain">DHHS</a>
               <a href="http://www.usa.gov" title="USA.gov" class="usagov img link</pre>
1893
    newdomain">USA.gov</a>
1894
           </div>
1895
           <div id="footer-contents-left">
1896
1897
               <a href="/About/disclaimer.html">Copyright</a> | <a
1898
    href="/About/disclaimer.html#disclaimer">Disclaimer</a> |
               <a href="http://www.nlm.nih.gov/privacy.html"</pre>
1899
    class="newdomain">Privacy</a> | <a</pre>
    href="/About/accessibility.html">Accessibility</a> | <a</pre>
    href="/About/glance/contact info.html">Contact</a>
               1900
                   <span class="url">
1901
                       <a class="fn url newdomain"</pre>
1902
```

CE8D3F2ECC59B781 0073SID:/projects/entrez/Entrez:3.19:portal201:v2.10.3.r203996:

<!--

Fri, Sep 03 2010 12:42:15--></body>

1918

1919 | </html>