

## GO Annotations

Locus	Gene Model(s)	GO term (links to Tair Keyword Browser) (GO ID)	cat	code	GO Slim	Reference	Made by: date last modified
<a href="#">AT1G58360</a>	AT1G58360	<a href="#">neutral L-amino acid transmembrane transporter activity</a> ( GO:0015175 )	func	<a href="#">IBA</a>	transporter activity	<a href="#">Communication:501741973</a>	NA 11/23/2022 00:00:00
	AT1G58360	<a href="#">L-glutamate transmembrane transporter activity</a> ( GO:0005313 )	func	<a href="#">IMP</a>	transporter activity	<a href="#">Publication:501760717 PMID:25005136</a>	<a href="#">TAIR</a> 11/20/2014 00:00:00
	AT1G58360	<a href="#">response to nematode</a> ( GO:0009624 )	proc	<a href="#">HEP</a>	response to external stimulus   response to biotic stimulus	<a href="#">Publication:501718529 PMID:16478044</a>	<a href="#">TAIR</a> 12/03/2019 00:00:00
	AT1G58360	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">IDA</a>	plasma membrane	<a href="#">Publication:2929 PMID:9374550</a>	<a href="#">TAIR</a> 03/31/2003 00:00:00
	AT1G58360.1	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">ISM</a>	plasma membrane	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
	AT1G58360	<a href="#">amino acid import</a> ( GO:0043090 )	proc	<a href="#">IMP</a>	transport	<a href="#">Publication:501730163 PMID:19392706</a>	<a href="#">TAIR</a> 05/28/2009 00:00:00
	AT1G58360	<a href="#">membrane</a> ( GO:0016020 )	comp	<a href="#">IBA</a>	other membranes	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT1G58360	<a href="#">L-glutamine transmembrane transporter activity</a> ( GO:0015186 )	func	<a href="#">IMP</a>	transporter activity	<a href="#">Publication:501760717 PMID:25005136</a>	<a href="#">TAIR</a> 11/20/2014 00:00:00
	AT1G58360	<a href="#">neutral L-amino acid transmembrane transporter activity</a> ( GO:0015175 )	func	<a href="#">IGI</a>	transporter activity	<a href="#">Publication:5123 PMID:8356039</a>	<a href="#">TAIR</a> 04/28/2003 00:00:00
	AT1G58360	<a href="#">L-serine transmembrane transporter activity</a> ( GO:0015194 )	func	<a href="#">IMP</a>	transporter activity	<a href="#">Publication:501760717 PMID:25005136</a>	<a href="#">TAIR</a> 11/20/2014 00:00:00
	AT1G58360	<a href="#">L-proline transmembrane transporter activity</a> ( GO:0015193 )	func	<a href="#">IMP</a>	transporter activity	<a href="#">Publication:501760717 PMID:25005136</a>	<a href="#">TAIR</a> 11/20/2014 00:00:00
	AT1G58360	<a href="#">amino acid transmembrane transport</a> ( GO:0003333 )	proc	<a href="#">IBA</a>	other cellular processes   transport	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT1G58360	<a href="#">neutral amino acid transport</a> ( GO:0015804 )	proc	<a href="#">IBA</a>	transport	<a href="#">Communication:501741973</a>	NA 04/20/2022 00:00:00
	AT1G58360	<a href="#">L-alanine transport</a> ( GO:0015808 )	proc	<a href="#">IMP</a>	transport	<a href="#">Publication:501760717 PMID:25005136</a>	<a href="#">TAIR</a> 11/20/2014 00:00:00
	AT1G58360	<a href="#">acidic amino acid transport</a> ( GO:0015800 )	proc	<a href="#">IBA</a>	transport	<a href="#">Communication:501741973</a>	NA 01/14/2023 00:00:00
	AT1G58360	<a href="#">L-glutamate import across plasma membrane</a> ( GO:0098712 )	proc	<a href="#">IMP</a>	other cellular processes   transport	<a href="#">Publication:501760717 PMID:25005136</a>	<a href="#">TAIR</a> 11/20/2014 00:00:00
	AT1G58360	<a href="#">amino acid transmembrane transporter activity</a> ( GO:0015171 )	func	<a href="#">ISS</a>	transporter activity	<a href="#">Communication:1674994</a>	<a href="#">TAIR</a> 07/04/2007 00:00:00
	AT1G58360	<a href="#">L-alanine transmembrane transporter activity</a>	func	<a href="#">IMP</a>	transporter activity	<a href="#">Publication:501760717 PMID:25005136</a>	<a href="#">TAIR</a> 11/20/2014

	( GO:0015180 )					00:00:00
AT1G58360	<a href="#">amino acid transmembrane transporter activity</a> ( GO:0015171 )	func	<a href="#">IMP</a>	transporter activity	<a href="#">Publication:501721440 PMID:17419840</a>	<a href="#">TAIR</a> 07/04/2007 00:00:00
AT1G58360	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">IDA</a>	plasma membrane	<a href="#">Publication:501721440 PMID:17419840</a>	<a href="#">TAIR</a> 06/21/2007 00:00:00
AT1G58360	<a href="#">acidic amino acid transmembrane transporter activity</a> ( GO:0015172 )	func	<a href="#">IBA</a>	transporter activity	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
AT1G58360	<a href="#">neutral amino acid transport</a> ( GO:0015804 )	proc	<a href="#">IGI</a>	transport	<a href="#">Publication:5123 PMID:8356039</a>	<a href="#">TAIR</a> 04/28/2003 00:00:00
<a href="#">AT5G04230</a>	<a href="#">response to wounding</a> ( GO:0009611 )	proc	<a href="#">TAS</a>	response to stress	<a href="#">Publication:4577 PMID:7888622</a>	<a href="#">TIGR</a> 04/17/2003 00:00:00
AT5G04230.1	<a href="#">cytoplasm</a> ( GO:0005737 )	comp	<a href="#">ISM</a>	cytoplasm	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
AT5G04230	<a href="#">phenylalanine ammonia-lyase activity</a> ( GO:0045548 )	func	<a href="#">IBA</a>	catalytic activity	<a href="#">Communication:501741973</a>	NA 04/02/2021 00:00:00
AT5G04230	<a href="#">protein binding</a> ( GO:0005515 )	func	<a href="#">IPI</a>	protein binding	<a href="#">Publication:501757837 PMID:24363316</a>	<a href="#">TAIR</a> 03/11/2014 00:00:00
AT5G04230	<a href="#">defense response</a> ( GO:0006952 )	proc	<a href="#">TAS</a>	response to stress	<a href="#">Publication:4577 PMID:7888622</a>	<a href="#">TIGR</a> 04/17/2003 00:00:00
AT5G04230.2	<a href="#">cytoplasm</a> ( GO:0005737 )	comp	<a href="#">ISM</a>	cytoplasm	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
AT5G04230	<a href="#">cinnamic acid biosynthetic process</a> ( GO:0009800 )	proc	<a href="#">IEA</a>	other metabolic processes   other cellular processes   secondary metabolic process   biosynthetic process	<a href="#">AnalysisReference:501757242</a>	NA 09/23/2023 00:00:00
AT5G04230	<a href="#">phenylalanine ammonia-lyase activity</a> ( GO:0045548 )	func	<a href="#">ISS</a>	catalytic activity	<a href="#">Publication:4577 PMID:7888622</a>	<a href="#">TAIR</a> 10/03/2008 00:00:00
<a href="#">AT1G08090</a>	<a href="#">lateral root development</a> ( GO:0048527 )	proc	<a href="#">IMP</a>	anatomical structure development   multicellular organism development   post-embryonic development	<a href="#">Publication:501718379 PMID:16415211</a>	<a href="#">TAIR</a> 02/09/2006 00:00:00
AT1G08090	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">IBA</a>	plasma membrane	<a href="#">Communication:501741973</a>	NA 11/23/2022 00:00:00
AT1G08090	<a href="#">nitrate transmembrane transport</a> ( GO:0015706 )	proc	<a href="#">IMP</a>	transport	<a href="#">Publication:501718379 PMID:16415211</a>	<a href="#">TAIR</a> 02/09/2006 00:00:00
AT1G08090	<a href="#">membrane</a> ( GO:0016020 )	comp	<a href="#">ISS</a>	other membranes	<a href="#">Publication:501717719 PMID:16157886</a>	<a href="#">TAIR</a> 10/21/2005

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AT1G08090.1	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">IDA</a>	plasma membrane	<a href="#">Publication:501747188 PMID:22227893</a>	<a href="#">TAIR</a> 03/22/2013 00:00:00
AT1G08090	<a href="#">nitrate transmembrane transporter activity</a> ( GO:0015112 )	func	<a href="#">TAS</a>	transporter activity	<a href="#">Publication:501717719 PMID:16157886</a>	<a href="#">TAIR</a> 10/21/2005 00:00:00
AT1G08090	<a href="#">lateral root development</a> ( GO:0048527 )	proc	<a href="#">IMP</a>	anatomical structure development   post-embryonic development   multicellular organism development	<a href="#">Publication:501717719 PMID:16157886</a>	<a href="#">TAIR</a> 10/21/2005 00:00:00
AT1G08090	<a href="#">nitrate transmembrane transporter activity</a> ( GO:0015112 )	func	<a href="#">IBA</a>	transporter activity	<a href="#">Communication:501741973</a>	NA 11/23/2022 00:00:00
AT1G08090	<a href="#">nitrate transmembrane transport</a> ( GO:0015706 )	proc	<a href="#">IBA</a>	transport	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
AT1G08090	<a href="#">cellular response to nitrate</a> ( GO:0071249 )	proc	<a href="#">IBA</a>	other cellular processes   response to chemical	<a href="#">Communication:501741973</a>	NA 03/31/2021 00:00:00
AT1G08090	<a href="#">nitrate transmembrane transport</a> ( GO:0015706 )	proc	<a href="#">IMP</a>	transport	<a href="#">Publication:501738153 PMID:20561257</a>	NA 06/11/2016 00:00:00
AT1G08090	<a href="#">response to nitrate</a> ( GO:0010167 )	proc	<a href="#">IEP</a>	response to chemical	<a href="#">Publication:501718378 PMID:16415212</a>	<a href="#">TAIR</a> 02/09/2006 00:00:00
AT1G08090	<a href="#">nitrate transmembrane transport</a> ( GO:0015706 )	proc	<a href="#">IMP</a>	transport	<a href="#">Publication:501738153 PMID:20561257</a>	NA 03/31/2021 00:00:00
AT1G08090	<a href="#">nitrate transmembrane transport</a> ( GO:0015706 )	proc	<a href="#">IMP</a>	transport	<a href="#">Publication:501679374 PMID:11165253</a>	<a href="#">TAIR</a> 03/28/2003 00:00:00
AT1G08090	<a href="#">nitrate transmembrane transporter activity</a> ( GO:0015112 )	func	<a href="#">ISS</a>	transporter activity	<a href="#">Communication:1674994</a>	<a href="#">TAIR</a> 03/29/2003 00:00:00
<a href="#">AT5G09300</a>	AT5G09300	<a href="#">branched-chain amino acid catabolic process</a> ( GO:0009083 )	proc	<a href="#">IBA</a>	other metabolic processes   catabolic process   other cellular processes	<a href="#">Communication:501741973</a>  NA 04/13/2023 00:00:00
	AT5G09300	<a href="#">mitochondrial alpha-ketoglutarate dehydrogenase complex</a> ( GO:0005947 )	comp	<a href="#">IBA</a>	other intracellular components   cytoplasm   mitochondrion	<a href="#">Communication:501741973</a>  NA 04/02/2021 00:00:00
	AT5G09300.3	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">ISM</a>	mitochondrion	<a href="#">AnalysisReference:501780126</a>  NA 08/31/2018 00:00:00
	AT5G09300.4	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">ISM</a>	mitochondrion	<a href="#">AnalysisReference:501780126</a>  NA 08/31/2018 00:00:00
	AT5G09300	<a href="#">branched-chain amino acid catabolic process</a> ( GO:0009083 )	proc	<a href="#">IGI</a>	other cellular processes   other	<a href="#">Publication:501764185 PMID:25986129</a>  NA 12/29/2021 00:00:00

				metabolic processes   catabolic process		
AT5G09300	<a href="#">3-methyl-2-oxobutanoate dehydrogenase (2-methylpropanoyl-transferring) activity</a> ( GO:0003863 )	func	<a href="#">IEA</a>	catalytic activity	<a href="#">AnalysisReference:501756967</a>	NA 09/23/2023 00:00:00
AT5G09300.1	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
AT5G09300	<a href="#">oxidoreductase activity, acting on the aldehyde or oxo group of donors,disulfide as acceptor</a> ( GO:0016624 )	func	<a href="#">IEA</a>	catalytic activity	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00
AT5G09300	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">IDA</a>	mitochondrion	<a href="#">Publication:501711954 PMID:14764908</a>	NA 01/10/2005 00:00:00
AT5G09300	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">HDA</a>	mitochondrion	<a href="#">Publication:501711651 PMID:14671022</a>	NA 04/15/2021 00:00:00
AT5G09300.2	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
<a href="#">AT2G24762</a>	AT2G24762.1	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>
	AT2G24762	<a href="#">molecular function unknown</a> ( GO:0003674 )	func	<a href="#">ND</a>	unknown molecular functions	<a href="#">TIGR Communication:1345790</a> 10/04/2003 00:00:00
	AT2G24762	<a href="#">regulation of amino acid export</a> ( GO:0080143 )	proc	<a href="#">IMP</a>	other cellular processes   transport	<a href="#">Publication:501735673 PMID:20018597</a> 01/25/2010 00:00:00
<a href="#">AT3G45660</a>	AT3G45660	<a href="#">transmembrane transport</a> ( GO:0055085 )	proc	<a href="#">IEA</a>	other cellular processes   transport	<a href="#">AnalysisReference:501756966</a> NA 09/23/2023 00:00:00
	AT3G45660	<a href="#">transmembrane transport</a> ( GO:0055085 )	proc	<a href="#">IBA</a>	transport   other cellular processes	<a href="#">Communication:501741973</a> NA 06/07/2023 00:00:00
	AT3G45660.2	<a href="#">extracellular region</a> ( GO:0005576 )	comp	<a href="#">ISM</a>	extracellular region	<a href="#">AnalysisReference:501780126</a> NA 08/31/2018 00:00:00
	AT3G45660	<a href="#">transmembrane transporter activity</a> ( GO:0022857 )	func	<a href="#">IBA</a>	transporter activity	<a href="#">Communication:501741973</a> NA 06/07/2023 00:00:00
	AT3G45660	<a href="#">transmembrane transporter activity</a> ( GO:0022857 )	func	<a href="#">IEA</a>	transporter activity	<a href="#">AnalysisReference:501756966</a> NA 09/23/2023 00:00:00
	AT3G45660	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">IBA</a>	plasma membrane	<a href="#">Communication:501741973</a> NA 06/07/2023 00:00:00
<a href="#">AT4G34710</a>	AT4G34710.1	<a href="#">nucleus</a> ( GO:0005634 )	comp	<a href="#">ISM</a>	nucleus	<a href="#">AnalysisReference:501780126</a> NA 08/31/2018 00:00:00
	AT4G34710	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">IDA</a>	chloroplast	<a href="#">Publication:501774152 PMID:28109885</a> NA 11/23/2017 00:00:00
	AT4G34710	<a href="#">protein binding</a> ( GO:0005515 )	func	<a href="#">IPI</a>	protein binding	<a href="#">Publication:501774152 PMID:28109885</a> NA 04/01/2021

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AT4G34710	<a href="#">response to jasmonic acid</a> ( GO:0009753 )	proc	<a href="#">IEP</a>	response to endogenous stimulus   response to chemical	<a href="#">Publication:501682524 PMID:12428010</a>	<a href="#">TAIR</a> 06/13/2006 00:00:00
AT4G34710	<a href="#">seed development</a> ( GO:0048316 )	proc	<a href="#">IGI</a>	reproduction   post-embryonic development   anatomical structure development   multicellular organism development	<a href="#">Publication:501714982 PMID:15733873</a>	<a href="#">TAIR</a> 06/13/2006 00:00:00
AT4G34710.2	<a href="#">nucleus</a> ( GO:0005634 )	comp	<a href="#">ISM</a>	nucleus	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
AT4G34710	<a href="#">cytosol</a> ( GO:0005829 )	comp	<a href="#">IDA</a>	cytosol	<a href="#">Publication:501774152 PMID:28109885</a>	NA 11/23/2017 00:00:00
AT4G34710	<a href="#">response to osmotic stress</a> ( GO:0006970 )	proc	<a href="#">IMP</a>	response to abiotic stimulus   response to stress	<a href="#">Publication:1199 PMID:10481069</a>	<a href="#">TAIR</a> 06/13/2006 00:00:00
AT4G34710	<a href="#">protein homodimerization activity</a> ( GO:0042803 )	func	<a href="#">IPI</a>	protein binding	<a href="#">Publication:501774152 PMID:28109885</a>	NA 04/01/2021 00:00:00
AT4G34710	<a href="#">arginine decarboxylase activity</a> ( GO:0008792 )	func	<a href="#">IBA</a>	catalytic activity	<a href="#">Communication:501741973</a>	NA 11/23/2022 00:00:00
AT4G34710	<a href="#">polyamine biosynthetic process</a> ( GO:0006596 )	proc	<a href="#">IMP</a>	other metabolic processes   other cellular processes   biosynthetic process	<a href="#">Publication:1199 PMID:10481069</a>	<a href="#">TAIR</a> 06/13/2006 00:00:00
AT4G34710	<a href="#">putrescine biosynthetic process</a> ( GO:0009446 )	proc	<a href="#">IMP</a>	other cellular processes   other metabolic processes   biosynthetic process	<a href="#">Publication:501714982 PMID:15733873</a>	<a href="#">TAIR</a> 06/13/2006 00:00:00
AT4G34710	<a href="#">arginine decarboxylase activity</a> ( GO:0008792 )	func	<a href="#">IMP</a>	catalytic activity	<a href="#">Publication:1199 PMID:10481069</a>	<a href="#">TAIR</a> 06/13/2006 00:00:00
AT4G34710	<a href="#">response to abscisic acid</a> ( GO:0009737 )	proc	<a href="#">IEP</a>	response to chemical   response to endogenous stimulus	<a href="#">Publication:501682524 PMID:12428010</a>	<a href="#">TAIR</a> 06/13/2006 00:00:00
AT4G34710	<a href="#">response to salt stress</a> ( GO:0009651 )	proc	<a href="#">IMP</a>	response to stress   response to abiotic stimulus	<a href="#">Publication:501712246 PMID:15086823</a>	<a href="#">TAIR</a> 06/13/2006 00:00:00
AT4G34710	<a href="#">response to cold</a> ( GO:0009409 )	proc	<a href="#">IMP</a>	response to abiotic stimulus	<a href="#">Publication:501727501 PMID:18701673</a>	NA 03/10/2009 00:00:00

				response to abiotic stimulus   response to stress   response to stress		
AT4G34710	<a href="#">response to wounding</a> ( GO:0009611 )	proc	<a href="#">IEP</a>	response to stress	<a href="#">Publication:501682524 PMID:12428010</a>	<a href="#">TAIR</a> 06/13/2006 00:00:00
AT4G34710	<a href="#">response to oxidative stress</a> ( GO:0006979 )	proc	<a href="#">IEP</a>	response to stress	<a href="#">Publication:501714511 PMID:15634198</a>	<a href="#">TAIR</a> 11/07/2005 00:00:00
AT4G34710	<a href="#">polyamine biosynthetic process</a> ( GO:0006596 )	proc	<a href="#">IMP</a>	biosynthetic process   other metabolic processes   other cellular processes	<a href="#">Publication:501768744 PMID:27014322</a>	<a href="#">TAIR</a> 05/16/2016 00:00:00
AT4G34710	<a href="#">arginine catabolic process</a> ( GO:0006527 )	proc	<a href="#">IEA</a>	other metabolic processes   other cellular processes   catabolic process	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00
AT4G08290	<a href="#">transmembrane transporter activity</a> ( GO:0022857 )	func	<a href="#">IEA</a>	transporter activity	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00
	<a href="#">biological process unknown</a> ( GO:0008150 )	proc	<a href="#">ND</a>	unknown biological processes	<a href="#">Communication:1345790</a>	<a href="#">TAIR</a> 08/08/2023 00:00:00
	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">IBA</a>	plasma membrane	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
AT2G13810	<a href="#">transaminase activity</a> ( GO:0008483 )	func	<a href="#">IDA</a>	transferase activity	<a href="#">Publication:501711783 PMID:14729919</a>	NA 04/01/2021 00:00:00
	<a href="#">systemic acquired resistance</a> ( GO:0009627 )	proc	<a href="#">IDA</a>	response to biotic stimulus   response to stress   response to external stimulus	<a href="#">Publication:501774810 PMID:28330936</a>	NA 04/12/2018 00:00:00
	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
	<a href="#">defense response to bacterium</a> ( GO:0042742 )	proc	<a href="#">IMP</a>	response to external stimulus   response to stress   response to biotic stimulus	<a href="#">Publication:501711783 PMID:14729919</a>	NA 03/31/2021 00:00:00
AT2G13810	<a href="#">systemic acquired resistance, salicylic acid mediated signaling pathway</a> ( GO:0009862 )	proc	<a href="#">IMP</a>	response to stress   response to chemical   response to biotic stimulus   response to external stimulus	<a href="#">Publication:501711783 PMID:14729919</a>	NA 03/31/2021 00:00:00

				signal transduction   other cellular processes		
AT2G13810	<a href="#">L-lysine alpha-aminotransferase</a> ( GO:0062045 )	func	<a href="#">IMP</a>	transferase activity	<a href="#">Publication:501774810 PMID:28330936</a>	NA 05/11/2018 00:00:00
AT2G13810	<a href="#">plastid</a> ( GO:0009536 )	comp	<a href="#">IDA</a>	plastid	<a href="#">Publication:501774810 PMID:28330936</a>	NA 04/12/2018 00:00:00
AT2G13810	<a href="#">pyridoxal phosphate binding</a> ( GO:0030170 )	func	<a href="#">IDA</a>	other binding	<a href="#">Publication:501753769 PMID:23385743</a>	NA 04/01/2021 00:00:00
AT2G13810	<a href="#">L-pipecolic acid biosynthetic process</a> ( GO:0062034 )	proc	<a href="#">IMP</a>	other metabolic processes   other cellular processes   biosynthetic process	<a href="#">Publication:501774810 PMID:28330936</a>	NA 05/11/2018 00:00:00
AT2G13810	<a href="#">leaf senescence</a> ( GO:0010150 )	proc	<a href="#">IMP</a>	multicellular organism development   anatomical structure development	<a href="#">Publication:501742909 PMID:21530897</a>	NA 03/31/2021 00:00:00
<a href="#">AT1G44800</a>	AT1G44800	<a href="#">amino acid import</a> ( GO:0043090 )	proc	<a href="#">IDA</a>	transport	<a href="#">Publication:501747275 PMID:22312005</a>
	AT1G44800	<a href="#">protein binding</a> ( GO:0005515 )	func	<a href="#">IPI</a>	protein binding	<a href="#">Publication:501743366 PMID:21798944</a>
	AT1G44800	<a href="#">amino acid transmembrane transporter activity</a> ( GO:0015171 )	func	<a href="#">IDA</a>	transporter activity	<a href="#">Publication:501747275 PMID:22312005</a>
	AT1G44800	<a href="#">amino acid transport</a> ( GO:0006865 )	proc	<a href="#">IDA</a>	transport	<a href="#">Publication:501747275 PMID:22312005</a>
	AT1G44800	<a href="#">intracellular amino acid homeostasis</a> ( GO:0080144 )	proc	<a href="#">IMP</a>	other biological processes	<a href="#">Publication:501747275 PMID:22312005</a>
	AT1G44800	<a href="#">amino acid export across plasma membrane</a> ( GO:0032973 )	proc	<a href="#">IDA</a>	transport   other cellular processes	<a href="#">Publication:501747275 PMID:22312005</a>
	AT1G44800	<a href="#">L-amino acid efflux transmembrane transporter activity</a> ( GO:0034639 )	func	<a href="#">IDA</a>	transporter activity	<a href="#">Publication:501747275 PMID:22312005</a>
	AT1G44800	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">IBA</a>	plasma membrane	<a href="#">Communication:501741973</a>
	AT1G44800.1	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">ISM</a>	mitochondrion	<a href="#">AnalysisReference:501780126</a>
<a href="#">AT1G01070</a>	AT1G01070	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">IDA</a>	plasma membrane	<a href="#">Publication:501747275 PMID:22312005</a>
	AT1G01070	<a href="#">L-glutamine transmembrane transporter activity</a> ( GO:0015186 )	func	<a href="#">IDA</a>	transporter activity	<a href="#">Publication:501767310 PMID:26628011</a>
	AT1G01070	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">IBA</a>	plasma membrane	<a href="#">Communication:501741973</a>

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AT1G01070.2	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">ISM</a>	mitochondrion	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
AT1G01070	<a href="#">seed development</a> ( GO:0048316 )	proc	<a href="#">IMP</a>	post-embryonic development   multicellular organism development   anatomical structure development   reproduction	<a href="#">Publication:501767310 PMID:26628011</a>	<a href="#">TAIR</a> 12/18/2015 00:00:00
AT1G01070	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">IDA</a>	plasma membrane	<a href="#">Publication:501767310 PMID:26628011</a>	<a href="#">TAIR</a> 12/15/2015 00:00:00
<a href="#">AT1G21890</a>	AT1G21890	<a href="#">secondary metabolic process</a> ( GO:0019748 )	proc	<a href="#">IEA</a>	secondary metabolic process	<a href="#">Publication:501796011 PMID:34562334</a>
	AT1G21890.1	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>
	AT1G21890	<a href="#">transmembrane transporter activity</a> ( GO:0022857 )	func	<a href="#">IEA</a>	transporter activity	<a href="#">AnalysisReference:501756966</a>
	AT1G21890	<a href="#">aromatic compound biosynthetic process</a> ( GO:0019438 )	proc	<a href="#">IEA</a>	biosynthetic process   other cellular processes   other metabolic processes	<a href="#">Publication:501796011 PMID:34562334</a>
	AT1G21890	<a href="#">positive regulation of RNA metabolic process</a> ( GO:0051254 )	proc	<a href="#">IEA</a>	nucleobase-containing compound metabolic process   other metabolic processes   other cellular processes	<a href="#">Publication:501796011 PMID:34562334</a>
	AT1G21890	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">IBA</a>	plasma membrane	<a href="#">Communication:501741973</a>
	AT1G21890	<a href="#">macromolecule biosynthetic process</a> ( GO:0009059 )	proc	<a href="#">IEA</a>	biosynthetic process   other metabolic processes	<a href="#">Publication:501796011 PMID:34562334</a>
	AT1G21890	<a href="#">positive regulation of cellular biosynthetic process</a> ( GO:0031328 )	proc	<a href="#">IEA</a>	biosynthetic process   other metabolic processes   other cellular processes	<a href="#">Publication:501796011 PMID:34562334</a>
	AT1G21890	<a href="#">organic cyclic compound biosynthetic process</a> ( GO:1901362 )	proc	<a href="#">IEA</a>	biosynthetic process   other metabolic processes	<a href="#">Publication:501796011 PMID:34562334</a>
	AT1G21890.2	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">ISM</a>	mitochondrion	<a href="#">AnalysisReference:501780126</a>

<a href="#">AT1G75500</a>	AT1G75500.1	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">HDA</a>	plasma membrane	<a href="#">Publication:501712339 PMID:15060130</a>	NA 05/10/2021 00:00:00
	AT1G75500.2	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">ISM</a>	mitochondrion	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
	AT1G75500	<a href="#">transmembrane transporter activity</a> ( GO:0022857 )	func	<a href="#">IEA</a>	transporter activity	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00
	AT1G75500	<a href="#">positive regulation of tryptophan metabolic process</a> ( GO:0090358 )	proc	<a href="#">IMP</a>	other cellular processes   other metabolic processes	<a href="#">Publication:501737837 PMID:20497379</a>	NA 07/01/2010 00:00:00
	AT1G75500	<a href="#">unidimensional cell growth</a> ( GO:0009826 )	proc	<a href="#">IMP</a>	cell growth   anatomical structure development   growth	<a href="#">Publication:501737837 PMID:20497379</a>	NA 06/02/2010 00:00:00
	AT1G75500	<a href="#">positive regulation of auxin metabolic process</a> ( GO:0090355 )	proc	<a href="#">IMP</a>	other metabolic processes   other cellular processes	<a href="#">Publication:501737837 PMID:20497379</a>	NA 07/01/2010 00:00:00
	AT1G75500	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">IBA</a>	plasma membrane	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT1G75500	<a href="#">auxin export across the plasma membrane</a> ( GO:0010315 )	proc	<a href="#">IMP</a>	transport   signal transduction   response to chemical   other cellular processes   response to endogenous stimulus   cell communication	<a href="#">Publication:501758568 PMID:24129639</a>	NA 06/11/2016 00:00:00
	AT1G75500.1	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">ISM</a>	mitochondrion	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
	AT1G75500	<a href="#">plant-type vacuole membrane</a> ( GO:0009705 )	comp	<a href="#">IDA</a>	vacuole   other membranes	<a href="#">Publication:501737837 PMID:20497379</a>	NA 07/01/2010 00:00:00
	AT1G75500	<a href="#">plant-type secondary cell wall biogenesis</a> ( GO:0009834 )	proc	<a href="#">IMP</a>	other cellular processes	<a href="#">Publication:501737837 PMID:20497379</a>	NA 06/02/2010 00:00:00
	AT1G75500.1	<a href="#">plant-type vacuole</a> ( GO:0000325 )	comp	<a href="#">HDA</a>	vacuole	<a href="#">Publication:501720626 PMID:17151019</a>	NA 05/12/2021 00:00:00
	AT1G75500	<a href="#">auxin export across the plasma membrane</a> ( GO:0010315 )	proc	<a href="#">IMP</a>	response to endogenous stimulus   signal transduction   cell communication   transport   response to chemical   other cellular processes	<a href="#">Publication:501758568 PMID:24129639</a>	NA 03/31/2021 00:00:00

<a href="#">AT3G54140</a>	AT3G54140.1	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">HDA</a>	plasma membrane	<a href="#">Publication:501710480 PMID:14506206</a>	NA 04/12/2021 00:00:00
	AT3G54140.2	<a href="#">nucleus</a> ( GO:0005634 )	comp	<a href="#">ISM</a>	nucleus	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
	AT3G54140	<a href="#">membrane</a> ( GO:0016020 )	comp	<a href="#">IBA</a>	other membranes	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT3G54140	<a href="#">nitrogen compound metabolic process</a> ( GO:0006807 )	proc	<a href="#">IMP</a>	other metabolic processes	<a href="#">Publication:501727427 PMID:18753286</a>	NA 03/09/2009 00:00:00
	AT3G54140	<a href="#">tripeptide transmembrane transporter activity</a> ( GO:0042937 )	func	<a href="#">IBA</a>	transporter activity	<a href="#">Communication:501741973</a>	NA 04/02/2021 00:00:00
	AT3G54140.1	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">HDA</a>	plasma membrane	<a href="#">Publication:501722708 PMID:17644812</a>	NA 04/07/2021 00:00:00
	AT3G54140	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">IDA</a>	plasma membrane	<a href="#">Publication:501714211 PMID:15500465</a>	<a href="#">TAIR</a> 01/23/2009 00:00:00
	AT3G54140	<a href="#">dipeptide transport</a> ( GO:0042938 )	proc	<a href="#">IBA</a>	transport	<a href="#">Communication:501741973</a>	NA 04/13/2023 00:00:00
	AT3G54140	<a href="#">dipeptide transmembrane transporter activity</a> ( GO:0071916 )	func	<a href="#">IBA</a>	transporter activity	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT3G54140.1	<a href="#">nucleus</a> ( GO:0005634 )	comp	<a href="#">ISM</a>	nucleus	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
	AT3G54140	<a href="#">transmembrane transport</a> ( GO:0055085 )	proc	<a href="#">IBA</a>	other cellular processes   transport	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT3G54140	<a href="#">tripeptide transport</a> ( GO:0042939 )	proc	<a href="#">IDA</a>	transport	<a href="#">Publication:501714211 PMID:15500465</a>	<a href="#">TAIR</a> 01/23/2009 00:00:00
	AT3G54140	<a href="#">tripeptide transmembrane transporter activity</a> ( GO:0042937 )	func	<a href="#">IDA</a>	transporter activity	<a href="#">Publication:501714211 PMID:15500465</a>	<a href="#">TAIR</a> 01/23/2009 00:00:00
	AT3G54140.1	<a href="#">plasmodesma</a> ( GO:0009506 )	comp	<a href="#">HDA</a>	other cellular components	<a href="#">Publication:501742898 PMID:21533090</a>	NA 04/07/2021 00:00:00
	AT3G54140	<a href="#">dipeptide transport</a> ( GO:0042938 )	proc	<a href="#">IDA</a>	transport	<a href="#">Publication:501714211 PMID:15500465</a>	<a href="#">TAIR</a> 01/23/2009 00:00:00
<a href="#">AT5G07440</a>	AT5G07440	<a href="#">glutamate dehydrogenase (NAD+) activity</a> ( GO:0004352 )	func	<a href="#">IBA</a>	catalytic activity	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT5G07440.3	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">HDA</a>	mitochondrion	<a href="#">Publication:501724621 PMID:18385124</a>	NA 04/07/2021 00:00:00
	AT5G07440.1	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">HDA</a>	mitochondrion	<a href="#">Publication:501720283 PMID:17137349</a>	NA 05/12/2021 00:00:00
	AT5G07440.3	<a href="#">ATP binding</a> ( GO:0005524 )	func	<a href="#">HDA</a>	nucleotide binding   other binding	<a href="#">Publication:501720283 PMID:17137349</a>	NA 05/12/2021 00:00:00
	AT5G07440.2	<a href="#">ATP binding</a> ( GO:0005524 )	func	<a href="#">HDA</a>	other binding   nucleotide binding	<a href="#">Publication:501720283 PMID:17137349</a>	NA 05/12/2021 00:00:00

AT5G07440	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">HDA</a>	plasma membrane	<a href="#">Publication:501776792 PMID:28887381</a>	NA 04/04/2019 00:00:00
AT5G07440.3	<a href="#">cytoplasm</a> ( GO:0005737 )	comp	<a href="#">ISM</a>	cytoplasm	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
AT5G07440.1	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">HDA</a>	mitochondrion	<a href="#">Publication:501724621 PMID:18385124</a>	NA 04/07/2021 00:00:00
AT5G07440	<a href="#">glutamate dehydrogenase [NAD(P)±] activity</a> ( GO:0004353 )	func	<a href="#">IDA</a>	catalytic activity	<a href="#">Publication:3329 PMID:9112779</a>	<a href="#">TAIR</a> 08/19/2008 00:00:00
AT5G07440.1	<a href="#">plant-type vacuole</a> ( GO:0000325 )	comp	<a href="#">HDA</a>	vacuole	<a href="#">Publication:501720626 PMID:17151019</a>	NA 05/12/2021 00:00:00
AT5G07440.2	<a href="#">cytoplasm</a> ( GO:0005737 )	comp	<a href="#">ISM</a>	cytoplasm	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
AT5G07440	<a href="#">glutamate dehydrogenase (NAD+) activity</a> ( GO:0004352 )	func	<a href="#">IDA</a>	catalytic activity	<a href="#">Publication:501724786 PMID:18467460</a>	NA 08/05/2008 00:00:00
AT5G07440.3	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">HDA</a>	mitochondrion	<a href="#">Publication:501720283 PMID:17137349</a>	NA 05/12/2021 00:00:00
AT5G07440.2	<a href="#">plant-type vacuole</a> ( GO:0000325 )	comp	<a href="#">HDA</a>	vacuole	<a href="#">Publication:501720626 PMID:17151019</a>	NA 05/12/2021 00:00:00
AT5G07440	<a href="#">amino acid metabolic process</a> ( GO:0006520 )	proc	<a href="#">IEA</a>	other metabolic processes   other cellular processes	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00
AT5G07440	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">HDA</a>	mitochondrion	<a href="#">Publication:501711651 PMID:14671022</a>	NA 04/15/2021 00:00:00
AT5G07440	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">HDA</a>	mitochondrion	<a href="#">Publication:501750648 PMID:22923678</a>	NA 04/07/2021 00:00:00
AT5G07440	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">IBA</a>	mitochondrion	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
AT5G07440.1	<a href="#">ATP binding</a> ( GO:0005524 )	func	<a href="#">HDA</a>	other binding   nucleotide binding	<a href="#">Publication:501720283 PMID:17137349</a>	NA 05/12/2021 00:00:00
AT5G07440	<a href="#">cobalt ion binding</a> ( GO:0050897 )	func	<a href="#">HDA</a>	other binding	<a href="#">Publication:501735675 PMID:20018591</a>	<a href="#">TAIR</a> 05/10/2021 00:00:00
AT5G07440	<a href="#">zinc ion binding</a> ( GO:0008270 )	func	<a href="#">HDA</a>	other binding	<a href="#">Publication:501735675 PMID:20018591</a>	<a href="#">TAIR</a> 05/10/2021 00:00:00
AT5G07440.2	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">HDA</a>	mitochondrion	<a href="#">Publication:501720283 PMID:17137349</a>	NA 05/12/2021 00:00:00
AT5G07440	<a href="#">glutamate catabolic process</a> ( GO:0006538 )	proc	<a href="#">IBA</a>	other cellular processes   other metabolic processes   catabolic process	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00

	AT5G07440.3	<a href="#">plant-type vacuole</a> ( GO:0000325 )	comp	<a href="#">HDA</a>	vacuole	<a href="#">Publication:501720626 PMID:17151019</a>	NA 05/12/2021 00:00:00
	AT5G07440	<a href="#">copper ion binding</a> ( GO:0005507 )	func	<a href="#">HDA</a>	other binding	<a href="#">Publication:501735675 PMID:20018591</a>	<a href="#">TAIR</a> 05/10/2021 00:00:00
	AT5G07440	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">HDA</a>	mitochondrion	<a href="#">Publication:1546214 PMID:11743115</a>	NA 05/10/2021 00:00:00
	AT5G07440.2	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">HDA</a>	mitochondrion	<a href="#">Publication:501724621 PMID:18385124</a>	NA 04/07/2021 00:00:00
	AT5G07440	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">IDA</a>	mitochondrion	<a href="#">Publication:3329 PMID:9112779</a>	<a href="#">TAIR</a> 08/19/2008 00:00:00
	AT5G07440.1	<a href="#">cytoplasm</a> ( GO:0005737 )	comp	<a href="#">ISM</a>	cytoplasm	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
<a href="#">AT4G08300</a>	AT4G08300	<a href="#">inorganic anion transport</a> ( GO:0015698 )	proc	<a href="#">IEA</a>	transport	<a href="#">Publication:501796011 PMID:34562334</a>	NA 11/14/2022 00:00:00
	AT4G08300	<a href="#">response to light stimulus</a> ( GO:0009416 )	proc	<a href="#">IEA</a>	response to light stimulus	<a href="#">Publication:501796011 PMID:34562334</a>	NA 11/14/2022 00:00:00
	AT4G08300	<a href="#">intracellular monoatomic cation homeostasis</a> ( GO:0030003 )	proc	<a href="#">IEA</a>	cellular homeostasis	<a href="#">Publication:501796011 PMID:34562334</a>	NA 12/24/2022 00:00:00
	AT4G08300	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">IBA</a>	plasma membrane	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT4G08300	<a href="#">transmembrane transporter activity</a> ( GO:0022857 )	func	<a href="#">IEA</a>	transporter activity	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00
	AT4G08300	<a href="#">cellular response to extracellular stimulus</a> ( GO:0031668 )	proc	<a href="#">IEA</a>	response to external stimulus   other cellular processes   cell communication	<a href="#">Publication:501796011 PMID:34562334</a>	NA 11/14/2022 00:00:00
<a href="#">AT3G04520</a>	AT3G04520	<a href="#">cytosol</a> ( GO:0005829 )	comp	<a href="#">IBA</a>	cytosol	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT3G04520	<a href="#">amino acid metabolic process</a> ( GO:0006520 )	proc	<a href="#">IEA</a>	other metabolic processes   other cellular processes	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00
	AT3G04520	<a href="#">threonine aldolase activity</a> ( GO:0004793 )	func	<a href="#">IDA</a>	catalytic activity	<a href="#">Publication:501720568 PMID:17172352</a>	<a href="#">TAIR</a> 01/29/2007 00:00:00
	AT3G04520	<a href="#">cytosol</a> ( GO:0005829 )	comp	<a href="#">HDA</a>	cytosol	<a href="#">Publication:501776792 PMID:28887381</a>	NA 04/04/2019 00:00:00
	AT3G04520	<a href="#">lyase activity</a> ( GO:0016829 )	func	<a href="#">IEA</a>	catalytic activity	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00
	AT3G04520	<a href="#">glycine biosynthetic process</a> ( GO:0006545 )	proc	<a href="#">IBA</a>	other metabolic processes   other cellular processes	<a href="#">Communication:501741973</a>	NA 04/13/2023 00:00:00

				biosynthetic process		
AT3G04520	<a href="#">threonine catabolic process</a> ( GO:0006567 )	proc	<a href="#">IBA</a>	other cellular processes   other metabolic processes   catabolic process	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
AT3G04520	<a href="#">threonine catabolic process</a> ( GO:0006567 )	proc	<a href="#">IMP</a>	catabolic process   other cellular processes   other metabolic processes	<a href="#">Publication:501720568 PMID:17172352</a>	<a href="#">TAIR</a> 01/29/2007 00:00:00
AT3G04520	<a href="#">cytosol</a> ( GO:0005829 )	comp	<a href="#">HDA</a>	cytosol	<a href="#">Publication:501761766 PMID:25293756</a>	NA 04/04/2019 00:00:00
AT3G04520.1	<a href="#">nucleus</a> ( GO:0005634 )	comp	<a href="#">ISM</a>	nucleus	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
AT3G04520.2	<a href="#">nucleus</a> ( GO:0005634 )	comp	<a href="#">ISM</a>	nucleus	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
AT3G04520	<a href="#">L-allo-threonine aldolase activity</a> ( GO:0008732 )	func	<a href="#">IBA</a>	catalytic activity	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
AT3G04520.3	<a href="#">nucleus</a> ( GO:0005634 )	comp	<a href="#">ISM</a>	nucleus	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
<a href="#">AT5G10180</a>	AT5G10180	<a href="#">sulfate transmembrane transporter activity</a> ( GO:0015116 )	func	<a href="#">IGI</a>	transporter activity	<a href="#">Publication:176 PMID:10929111</a>
	AT5G10180	<a href="#">sulfate transmembrane transporter activity</a> ( GO:0015116 )	func	<a href="#">ISS</a>	transporter activity	<a href="#">Communication:1674994</a>
	AT5G10180.1	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>
	AT5G10180	<a href="#">sulfate transmembrane transport</a> ( GO:1902358 )	proc	<a href="#">IGI</a>	transport   other cellular processes	<a href="#">Publication:176 PMID:10929111</a>
	AT5G10180	<a href="#">secondary active sulfate transmembrane transporter activity</a> ( GO:0008271 )	func	<a href="#">IEA</a>	transporter activity	<a href="#">AnalysisReference:501756966</a>
	AT5G10180	<a href="#">sulfate transmembrane transporter activity</a> ( GO:0015116 )	func	<a href="#">IGI</a>	transporter activity	<a href="#">Publication:3057 PMID:9380766</a>
	AT5G10180	<a href="#">sulfate transport</a> ( GO:0008272 )	proc	<a href="#">IGI</a>	transport	<a href="#">Publication:3057 PMID:9380766</a>
<a href="#">AT4G08870</a>	AT4G08870	<a href="#">cytosol</a> ( GO:0005829 )	comp	<a href="#">HDA</a>	cytosol	<a href="#">Publication:501776792 PMID:28887381</a>
	AT4G08870.1	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">ISM</a>	mitochondrion	<a href="#">AnalysisReference:501780126</a>
	AT4G08870	<a href="#">agmatinase activity</a> ( GO:0008783 )	func	<a href="#">IDA</a>	hydrolase activity	<a href="#">Publication:501776290 PMID:28716421</a>

AT4G08870.2	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">ISM</a>	mitochondrion	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
AT4G08870.2	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">HDA</a>	mitochondrion	<a href="#">Publication:501724621 PMID:18385124</a>	NA 04/07/2021 00:00:00
AT4G08870	<a href="#">chloroplast stroma</a> ( GO:0009570 )	comp	<a href="#">IDA</a>	plastid   chloroplast	<a href="#">Publication:501776290 PMID:28716421</a>	NA 09/11/2017 00:00:00
AT4G08870	<a href="#">ornithine metabolic process</a> ( GO:0006591 )	proc	<a href="#">IMP</a>	other cellular processes   other metabolic processes	<a href="#">Publication:501746102 PMID:22188168</a>	<a href="#">TAIR</a> 01/25/2012 00:00:00
AT4G08870	<a href="#">putrescine biosynthetic process from arginine, using agmatinase</a> ( GO:0033389 )	proc	<a href="#">IBA</a>	other cellular processes   biosynthetic process   other metabolic processes	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
AT4G08870	<a href="#">proline metabolic process</a> ( GO:0006560 )	proc	<a href="#">IMP</a>	other metabolic processes   other cellular processes	<a href="#">Publication:501746102 PMID:22188168</a>	<a href="#">TAIR</a> 01/25/2012 00:00:00
AT4G08870	<a href="#">putrescine biosynthetic process from arginine, using agmatinase</a> ( GO:0033389 )	proc	<a href="#">IDA</a>	other cellular processes   other metabolic processes   biosynthetic process	<a href="#">Publication:501776290 PMID:28716421</a>	NA 03/31/2021 00:00:00
AT4G08870	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">HDA</a>	mitochondrion	<a href="#">Publication:501761766 PMID:25293756</a>	NA 04/04/2019 00:00:00
AT4G08870	<a href="#">defense response to fungus</a> ( GO:0050832 )	proc	<a href="#">IMP</a>	response to external stimulus   response to stress   response to biotic stimulus	<a href="#">Publication:501746102 PMID:22188168</a>	<a href="#">TAIR</a> 01/25/2012 00:00:00
AT4G08870	<a href="#">cobalt ion binding</a> ( GO:0050897 )	func	<a href="#">HDA</a>	other binding	<a href="#">Publication:501735675 PMID:20018591</a>	<a href="#">TAIR</a> 05/10/2021 00:00:00
AT4G08870	<a href="#">putrescine biosynthetic process</a> ( GO:0009446 )	proc	<a href="#">IGI</a>	biosynthetic process   other metabolic processes   other cellular processes	<a href="#">Publication:501776290 PMID:28716421</a>	NA 09/11/2017 00:00:00
AT4G08870	<a href="#">urea cycle</a> ( GO:0000050 )	proc	<a href="#">IEA</a>	other metabolic processes   biosynthetic process   other cellular processes	<a href="#">AnalysisReference:501757242</a>	NA 09/23/2023 00:00:00
AT4G08870	<a href="#">arginase activity</a> ( GO:0004053 )	func	<a href="#">IGI</a>	hydrolase activity	<a href="#">Publication:501724506 PMID:18425591</a>	<a href="#">TAIR</a> 11/21/2008 00:00:00
AT4G08870	<a href="#">putrescine biosynthetic process</a>	proc	<a href="#">IDA</a>	biosynthetic process   other	<a href="#">Publication:501776290 PMID:28716421</a>	NA 09/11/2017

	( GO:0009446 )			cellular processes   other metabolic processes		00:00:00	
AT4G08870.1	<a href="#">mitochondrion</a> ( GO:0005739 )	comp	<a href="#">HDA</a>	mitochondrion	<a href="#">Publication:501724621 PMID:18385124</a>	NA 04/07/2021 00:00:00	
AT4G08870	<a href="#">tyrosine metabolic process</a> ( GO:0006570 )	proc	<a href="#">IMP</a>	other metabolic processes   other cellular processes	<a href="#">Publication:501746102 PMID:22188168</a>	<a href="#">TAIR</a> 01/25/2012 00:00:00	
AT4G08870	<a href="#">metal ion binding</a> ( GO:0046872 )	func	<a href="#">IEA</a>	other binding	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00	
AT4G08870	<a href="#">arginase activity</a> ( GO:0004053 )	func	<a href="#">IDA</a>	hydrolase activity	<a href="#">Publication:501746102 PMID:22188168</a>	<a href="#">TAIR</a> 01/25/2012 00:00:00	
AT4G08870	<a href="#">agmatinase activity</a> ( GO:0008783 )	func	<a href="#">IBA</a>	hydrolase activity	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00	
<a href="#">AT3G19710</a>	AT3G19710	<a href="#">methionine-oxo-acid transaminase activity</a> ( GO:0010326 )	func	<a href="#">IDA</a>	transferase activity	<a href="#">Publication:501720068 PMID:17056707</a>	<a href="#">TAIR</a> 02/02/2007 00:00:00
	AT3G19710	<a href="#">glucosinolate biosynthetic process</a> ( GO:0019761 )	proc	<a href="#">IMP</a>	other cellular processes   secondary metabolic process   other metabolic processes   biosynthetic process	<a href="#">Publication:501720068 PMID:17056707</a>	<a href="#">TAIR</a> 01/08/2007 00:00:00
	AT3G19710	<a href="#">response to light stimulus</a> ( GO:0009416 )	proc	<a href="#">IEP</a>	response to light stimulus	<a href="#">Publication:501720068 PMID:17056707</a>	NA 03/31/2021 00:00:00
	AT3G19710	<a href="#">branched-chain-amino-acid transaminase activity</a> ( GO:0004084 )	func	<a href="#">IBA</a>	transferase activity	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT3G19710	<a href="#">branched-chain-amino-acid transaminase activity</a> ( GO:0004084 )	func	<a href="#">IEA</a>	transferase activity	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00
	AT3G19710	<a href="#">branched-chain amino acid metabolic process</a> ( GO:0009081 )	proc	<a href="#">IEA</a>	other cellular processes   other metabolic processes	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00
	AT3G19710	<a href="#">response to wounding</a> ( GO:0009611 )	proc	<a href="#">IEP</a>	response to stress	<a href="#">Publication:501720068 PMID:17056707</a>	NA 03/31/2021 00:00:00
	AT3G19710.1	<a href="#">cytoplasm</a> ( GO:0005737 )	comp	<a href="#">ISM</a>	cytoplasm	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
	AT3G19710	<a href="#">cytosol</a> ( GO:0005829 )	comp	<a href="#">IDA</a>	cytosol   cytosol	<a href="#">Publication:501720068 PMID:17056707</a>	<a href="#">TAIR</a> 01/08/2007 00:00:00
<a href="#">AT1G11120</a>	AT1G11120	<a href="#">regionalization</a> ( GO:0003002 )	proc	<a href="#">IEA</a>	multicellular organism development	<a href="#">Publication:501796011 PMID:34562334</a>	NA 11/14/2022 00:00:00
	AT1G11120	<a href="#">meiotic cell cycle process</a> ( GO:1903046 )	proc	<a href="#">IEA</a>	cell cycle   other cellular	<a href="#">Publication:501796011 PMID:34562334</a>	NA 11/14/2022

				processes   reproduction		00:00:00	
AT1G11120	<a href="#">molecular function unknown</a> ( GO:0003674 )	func	<a href="#">ND</a>	unknown molecular functions	<a href="#">Communication:1345790</a>	<a href="#">TAIR</a> 10/20/2006 00:00:00	
AT1G11120.1	<a href="#">nucleus</a> ( GO:0005634 )	comp	<a href="#">ISM</a>	nucleus	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00	
AT1G11120	<a href="#">cytokinesis</a> ( GO:0000910 )	proc	<a href="#">IEA</a>	cell cycle   other cellular processes	<a href="#">Publication:501796011 PMID:34562334</a>	NA 11/14/2022 00:00:00	
AT1G11120	<a href="#">phyllome development</a> ( GO:0048827 )	proc	<a href="#">IEA</a>	multicellular organism development   anatomical structure development	<a href="#">Publication:501796011 PMID:34562334</a>	NA 11/14/2022 00:00:00	
AT1G11120.2	<a href="#">nucleus</a> ( GO:0005634 )	comp	<a href="#">ISM</a>	nucleus	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00	
<a href="#">AT2G17630</a>	AT2G17630.1	<a href="#">chloroplast thylakoid</a> ( GO:0009534 )	comp	<a href="#">HDA</a>	other intracellular components   thylakoid   plastid   chloroplast	<a href="#">Publication:501735990 PMID:20061580</a>	NA 04/07/2021 00:00:00
	AT2G17630	<a href="#">L-serine biosynthetic process</a> ( GO:0006564 )	proc	<a href="#">IBA</a>	biosynthetic process   other metabolic processes   other cellular processes	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT2G17630	<a href="#">O-phospho-L-serine:2-oxoglutarate aminotransferase activity</a> ( GO:0004648 )	func	<a href="#">IBA</a>	transferase activity	<a href="#">Communication:501741973</a>	NA 01/14/2023 00:00:00
	AT2G17630.1	<a href="#">chloroplast stroma</a> ( GO:0009570 )	comp	<a href="#">HDA</a>	plastid   chloroplast	<a href="#">Publication:501735990 PMID:20061580</a>	NA 04/07/2021 00:00:00
	AT2G17630	<a href="#">pyridoxal phosphate binding</a> ( GO:0030170 )	func	<a href="#">IBA</a>	other binding	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT2G17630	<a href="#">cytoplasm</a> ( GO:0005737 )	comp	<a href="#">IBA</a>	cytoplasm	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT2G17630.1	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">HDA</a>	chloroplast	<a href="#">Publication:501724486 PMID:18431481</a>	NA 04/07/2021 00:00:00
	AT2G17630.1	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
	AT2G17630	<a href="#">O-phospho-L-serine:2-oxoglutarate aminotransferase activity</a> ( GO:0004648 )	func	<a href="#">IEA</a>	transferase activity	<a href="#">AnalysisReference:501756967</a>	NA 09/23/2023 00:00:00
	AT2G17630	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">HDA</a>	chloroplast	<a href="#">Publication:501761766 PMID:25293756</a>	NA 04/04/2019 00:00:00
<a href="#">AT3G45650</a>	AT3G45650	<a href="#">nitrate efflux transmembrane transporter activity</a> ( GO:0010542 )	func	<a href="#">IMP</a>	transporter activity	<a href="#">Publication:501723592 PMID:17993627</a>	<a href="#">TAIR</a> 08/22/2008 00:00:00

	AT3G45650.1	<a href="#">nucleus</a> ( GO:0005634 )	comp	<a href="#">ISM</a>	nucleus	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
	AT3G45650	<a href="#">nitrate transmembrane transport</a> ( GO:0015706 )	proc	<a href="#">IMP</a>	transport	<a href="#">Publication:501723592 PMID:17993627</a>	<a href="#">TAIR</a> 01/16/2008 00:00:00
	AT3G45650	<a href="#">transmembrane transport</a> ( GO:0055085 )	proc	<a href="#">IEA</a>	transport l other cellular processes	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00
	AT3G45650.2	<a href="#">nucleus</a> ( GO:0005634 )	comp	<a href="#">ISM</a>	nucleus	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
	AT3G45650	<a href="#">response to acidic pH</a> ( GO:0010447 )	proc	<a href="#">IMP</a>	response to abiotic stimulus	<a href="#">Publication:501723592 PMID:17993627</a>	<a href="#">TAIR</a> 01/16/2008 00:00:00
	AT3G45650	<a href="#">transmembrane transporter activity</a> ( GO:0022857 )	func	<a href="#">IEA</a>	transporter activity	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00
	AT3G45650	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">IDA</a>	plasma membrane	<a href="#">Publication:501723592 PMID:17993627</a>	<a href="#">TAIR</a> 01/16/2008 00:00:00
	AT3G45650	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">IBA</a>	plasma membrane	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT3G45650	<a href="#">transmembrane transporter activity</a> ( GO:0022857 )	func	<a href="#">IBA</a>	transporter activity	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT3G45650	<a href="#">transmembrane transport</a> ( GO:0055085 )	proc	<a href="#">IBA</a>	transport l other cellular processes	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
<a href="#">AT1G12940</a>	AT1G12940	<a href="#">nitrate transmembrane transporter activity</a> ( GO:0015112 )	func	<a href="#">IEA</a>	transporter activity	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00
	AT1G12940	<a href="#">biological_process_unknown</a> ( GO:0008150 )	proc	<a href="#">ND</a>	unknown biological processes	<a href="#">Communication:1345790</a>	<a href="#">TAIR</a> 08/08/2023 00:00:00
	AT1G12940	<a href="#">nitrate transmembrane transporter activity</a> ( GO:0015112 )	func	<a href="#">ISS</a>	transporter activity	<a href="#">Communication:1674994</a>	<a href="#">TAIR</a> 03/29/2003 00:00:00
	AT1G12940.1	<a href="#">cytoplasm</a> ( GO:0005737 )	comp	<a href="#">ISM</a>	cytoplasm	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
<a href="#">AT3G22740</a>	AT3G22740	<a href="#">S-methylmethionine cycle</a> ( GO:0033528 )	proc	<a href="#">IBA</a>	other cellular processes l other metabolic processes	<a href="#">Communication:501741973</a>	NA 03/31/2021 00:00:00
	AT3G22740	<a href="#">S-adenosylmethionine-homocysteine S-methyltransferase activity</a> ( GO:0008898 )	func	<a href="#">IBA</a>	transferase activity	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT3G22740	<a href="#">methionine biosynthetic process</a> ( GO:0009086 )	proc	<a href="#">IBA</a>	other metabolic processes l biosynthetic process l other cellular processes	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT3G22740	<a href="#">zinc ion binding</a> ( GO:0008270 )	func	<a href="#">IEA</a>	other binding	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00

	AT3G22740.1	<a href="#">cytoplasm</a> ( GO:0005737 )	comp	<a href="#">ISM</a>	cytoplasm	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
AT5G28020	AT5G28020	<a href="#">plastid</a> ( GO:0009536 )	comp	<a href="#">HDA</a>	plastid	<a href="#">Publication:501776792 PMID:28887381</a>	NA 04/04/2019 00:00:00
	AT5G28020.4	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
	AT5G28020	<a href="#">cysteine synthase activity</a> ( GO:0004124 )	func	<a href="#">IMP</a>	transferase activity	<a href="#">Publication:339 PMID:10845460</a>	<a href="#">TAIR</a> 05/14/2009 00:00:00
	AT5G28020	<a href="#">cytoplasm</a> ( GO:0005737 )	comp	<a href="#">IBA</a>	cytoplasm	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT5G28020.5	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
	AT5G28020	<a href="#">cysteine biosynthetic process from serine</a> ( GO:0006535 )	proc	<a href="#">IBA</a>	biosynthetic process   other cellular processes   other metabolic processes	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT5G28020.2	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
	AT5G28020	<a href="#">cysteine biosynthetic process</a> ( GO:0019344 )	proc	<a href="#">IMP</a>	other cellular processes   biosynthetic process   other metabolic processes	<a href="#">Publication:339 PMID:10845460</a>	NA 04/01/2021 00:00:00
	AT5G28020	<a href="#">L-3-cyanoalanine synthase activity</a> ( GO:0050017 )	func	<a href="#">IEA</a>	catalytic activity	<a href="#">AnalysisReference:501756967</a>	NA 09/23/2023 00:00:00
	AT5G28020.3	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
	AT5G28020	<a href="#">cysteine biosynthetic process from serine</a> ( GO:0006535 )	proc	<a href="#">IEA</a>	biosynthetic process   other metabolic processes   other cellular processes	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00
	AT5G28020.1	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
	AT5G28020	<a href="#">cysteine synthase activity</a> ( GO:0004124 )	func	<a href="#">IBA</a>	transferase activity	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT5G28020	<a href="#">cytosol</a> ( GO:0005829 )	comp	<a href="#">HDA</a>	cytosol	<a href="#">Publication:501761766 PMID:25293756</a>	NA 04/04/2019 00:00:00
	AT5G28020.6	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
AT1G43650	AT1G43650	<a href="#">response to water deprivation</a> ( GO:0009414 )	proc	<a href="#">IEA</a>	response to abiotic stimulus   response to	<a href="#">Publication:501796011 PMID:34562334</a>	NA 11/14/2022 00:00:00

				stress   response to chemical		
AT1G43650	<a href="#">regulation of cell wall organization or biogenesis</a> ( GO:1903338 )	proc	<a href="#">IEA</a>	other cellular processes	<a href="#">Publication:501796011 PMID:34562334</a>	NA 11/14/2022 00:00:00
AT1G43650	<a href="#">transmembrane transporter activity</a> ( GO:0022857 )	func	<a href="#">IEA</a>	transporter activity	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00
AT1G43650	<a href="#">response to lipid</a> ( GO:0033993 )	proc	<a href="#">IEA</a>	response to chemical	<a href="#">Publication:501796011 PMID:34562334</a>	NA 11/14/2022 00:00:00
AT1G43650.1	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
AT1G43650	<a href="#">indole-containing compound biosynthetic process</a> ( GO:0042435 )	proc	<a href="#">IEA</a>	other cellular processes   other metabolic processes   biosynthetic process	<a href="#">Publication:501796011 PMID:34562334</a>	NA 11/14/2022 00:00:00
AT1G43650	<a href="#">plant-type cell wall biogenesis</a> ( GO:0009832 )	proc	<a href="#">IEA</a>	other cellular processes	<a href="#">Publication:501796011 PMID:34562334</a>	NA 11/14/2022 00:00:00
AT1G43650	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">IBA</a>	plasma membrane	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
AT1G43650	<a href="#">response to wounding</a> ( GO:0009611 )	proc	<a href="#">IEA</a>	response to stress	<a href="#">Publication:501796011 PMID:34562334</a>	NA 11/14/2022 00:00:00
AT1G43650	<a href="#">oxoacid metabolic process</a> ( GO:0043436 )	proc	<a href="#">IEA</a>	other cellular processes   other metabolic processes	<a href="#">Publication:501796011 PMID:34562334</a>	NA 11/14/2022 00:00:00
<a href="#">AT1G33440</a>	AT1G33440	<a href="#">membrane</a> ( GO:0016020 )	comp	<a href="#">IBA</a>	other membranes	<a href="#">Communication:501741973</a>
	AT1G33440	<a href="#">transmembrane transporter activity</a> ( GO:0022857 )	func	<a href="#">IBA</a>	transporter activity	<a href="#">Communication:501741973</a>
	AT1G33440	<a href="#">transmembrane transporter activity</a> ( GO:0022857 )	func	<a href="#">IEA</a>	transporter activity	<a href="#">AnalysisReference:501756966</a>
	AT1G33440	<a href="#">transmembrane transport</a> ( GO:0055085 )	proc	<a href="#">IBA</a>	transport   other cellular processes	<a href="#">Communication:501741973</a>
	AT1G33440	<a href="#">transmembrane transport</a> ( GO:0055085 )	proc	<a href="#">IEA</a>	other cellular processes   transport	<a href="#">AnalysisReference:501756966</a>
<a href="#">AT5G05730</a>	AT5G05730	<a href="#">regulation of auxin biosynthetic process</a> ( GO:0010600 )	proc	<a href="#">IMP</a>	other cellular processes   other metabolic processes   biosynthetic process	<a href="#">Publication:501716366 PMID:15980261</a>
	AT5G05730.1	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">HDA</a>	chloroplast	<a href="#">Publication:501724486 PMID:18431481</a>

AT5G05730	<a href="#">response to wounding</a> ( GO:0009611 )	proc	<a href="#">IEP</a>	response to stress	<a href="#">Publication:5393 PMID:1392592</a>	<a href="#">TAIR</a> 10/09/2002 00:00:00
AT5G05730	<a href="#">protein binding</a> ( GO:0005515 )	func	<a href="#">IPI</a>	protein binding	<a href="#">Publication:501790246 PMID:32612234</a>	NA 09/23/2023 00:00:00
AT5G05730	<a href="#">tryptophan biosynthetic process</a> ( GO:0000162 )	proc	<a href="#">IMP</a>	other metabolic processes   other cellular processes   biosynthetic process	<a href="#">Publication:4108 PMID:8587994</a>	NA 03/31/2021 00:00:00
AT5G05730.1	<a href="#">chloroplast stroma</a> ( GO:0009570 )	comp	<a href="#">HDA</a>	plastid   chloroplast	<a href="#">Publication:501735990 PMID:20061580</a>	NA 04/07/2021 00:00:00
AT5G05730.2	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
AT5G05730	<a href="#">auxin biosynthetic process</a> ( GO:0009851 )	proc	<a href="#">IGI</a>	other metabolic processes   other cellular processes   biosynthetic process	<a href="#">Publication:501716366 PMID:15980261</a>	NA 08/22/2008 00:00:00
AT5G05730	<a href="#">response to wounding</a> ( GO:0009611 )	proc	<a href="#">IEP</a>	response to stress	<a href="#">Publication:5393 PMID:1392592</a>	<a href="#">TIGR</a> 04/17/2003 00:00:00
AT5G05730	<a href="#">response to bacterium</a> ( GO:0009617 )	proc	<a href="#">IEP</a>	response to external stimulus   response to biotic stimulus	<a href="#">Publication:5393 PMID:1392592</a>	<a href="#">TIGR</a> 04/17/2003 00:00:00
AT5G05730	<a href="#">anthranilate synthase complex</a> ( GO:0005950 )	comp	<a href="#">NAS</a>	cytoplasm	<a href="#">Publication:5393 PMID:1392592</a>	<a href="#">TAIR</a> 04/16/2003 00:00:00
AT5G05730	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">TAS</a>	chloroplast	<a href="#">Publication:5393 PMID:1392592</a>	<a href="#">TIGR</a> 04/17/2003 00:00:00
AT5G05730	<a href="#">tryptophan biosynthetic process</a> ( GO:0000162 )	proc	<a href="#">TAS</a>	other cellular processes   biosynthetic process   other metabolic processes	<a href="#">Publication:5393 PMID:1392592</a>	<a href="#">TAIR</a> 02/26/2003 00:00:00
AT5G05730	<a href="#">anthranilate synthase activity</a> ( GO:0004049 )	func	<a href="#">IDA</a>	catalytic activity	<a href="#">Publication:4754 PMID:7972519</a>	NA 04/01/2021 00:00:00
AT5G05730	<a href="#">response to bacterium</a> ( GO:0009617 )	proc	<a href="#">IEP</a>	response to external stimulus   response to biotic stimulus	<a href="#">Publication:501678374</a>	<a href="#">TAIR</a> 09/20/2006 00:00:00
AT5G05730.1	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
AT5G05730	<a href="#">tryptophan biosynthetic process</a> ( GO:0000162 )	proc	<a href="#">IMP</a>	other cellular processes   other metabolic processes	<a href="#">Publication:3942 PMID:8934623</a>	NA 03/31/2021 00:00:00

				biosynthetic process		
AT5G05730	<a href="#">response to ethylene</a> ( GO:0009723 )	proc	<a href="#">IGI</a>	response to chemical   response to endogenous stimulus	<a href="#">Publication:501716366 PMID:15980261</a>	NA 08/22/2008 00:00:00
AT5G05730	<a href="#">anthranilate synthase activity</a> ( GO:0004049 )	func	<a href="#">IGI</a>	catalytic activity	<a href="#">Publication:5393 PMID:1392592</a>	<a href="#">TIGR</a> 04/17/2003 00:00:00
AT5G05730	<a href="#">lateral root formation</a> ( GO:0010311 )	proc	<a href="#">IMP</a>	anatomical structure development   multicellular organism development   post-embryonic development	<a href="#">Publication:501724458 PMID:18435826</a>	<a href="#">TAIR</a> 11/12/2012 00:00:00
AT5G05730	<a href="#">tryptophan biosynthetic process</a> ( GO:0000162 )	proc	<a href="#">TAS</a>	biosynthetic process   other metabolic processes   other cellular processes	<a href="#">Publication:5393 PMID:1392592</a>	<a href="#">TIGR</a> 04/17/2003 00:00:00
AT5G05730	<a href="#">regulation of auxin biosynthetic process</a> ( GO:0010600 )	proc	<a href="#">IMP</a>	other cellular processes   biosynthetic process   other metabolic processes	<a href="#">Publication:501730408 PMID:19435934</a>	NA 03/31/2021 00:00:00
AT5G05730	<a href="#">tryptophan biosynthetic process</a> ( GO:0000162 )	proc	<a href="#">IBA</a>	other cellular processes   other metabolic processes   biosynthetic process	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
AT5G05730	<a href="#">tryptophan biosynthetic process</a> ( GO:0000162 )	proc	<a href="#">IEA</a>	other metabolic processes   biosynthetic process   other cellular processes	<a href="#">AnalysisReference:501757242</a>	NA 09/23/2023 00:00:00
AT5G05730	<a href="#">anthranilate synthase activity</a> ( GO:0004049 )	func	<a href="#">IMP</a>	catalytic activity	<a href="#">Publication:5393 PMID:1392592</a>	<a href="#">TAIR</a> 10/02/2006 00:00:00
AT3G22460	AT3G22460.2	<a href="#">cytoplasm</a> ( GO:0005737 )	comp	<a href="#">ISM</a>	cytoplasm	<a href="#">AnalysisReference:501780126</a>
	AT3G22460	<a href="#">response to zinc ion</a> ( GO:0010043 )	proc	<a href="#">IEP</a>	response to chemical	<a href="#">Publication:501711554 PMID:14690510</a>
	AT3G22460	<a href="#">cytosol</a> ( GO:0005829 )	comp	<a href="#">HDA</a>	cytosol	<a href="#">Publication:501776792 PMID:28887381</a>
	AT3G22460	<a href="#">cytoplasm</a> ( GO:0005737 )	comp	<a href="#">IBA</a>	cytoplasm	<a href="#">Communication:501741973</a>
	AT3G22460	<a href="#">cysteine biosynthetic process from serine</a> ( GO:0006535 )	proc	<a href="#">IEA</a>	biosynthetic process   other cellular	<a href="#">AnalysisReference:501756966</a>

				processes   other metabolic processes		
AT3G22460	<a href="#">cysteine biosynthetic process from serine</a> ( GO:0006535 )	proc	<a href="#">IBA</a>	other metabolic processes   other cellular processes   biosynthetic process	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
AT3G22460	<a href="#">cysteine synthase activity</a> ( GO:0004124 )	func	<a href="#">IBA</a>	transferase activity	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
AT3G22460.1	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
AT3G22460	<a href="#">cytosol</a> ( GO:0005829 )	comp	<a href="#">HDA</a>	cytosol	<a href="#">Publication:501761766 PMID:25293756</a>	NA 04/04/2019 00:00:00
<a href="#">AT3G58990</a>	AT3G58990			other cellular processes   biosynthetic process   other metabolic processes   secondary metabolic process		
	AT3G58990	<a href="#">glucosinolate biosynthetic process</a> ( GO:0019761 )	proc	<a href="#">IMP</a>		<a href="#">Publication:501738361 PMID:20663849</a>
	AT3G58990	<a href="#">plastid</a> ( GO:0009536 )	comp	<a href="#">IDA</a>	plastid	<a href="#">Publication:501730495 PMID:19542295</a>
	AT3G58990	<a href="#">plastid</a> ( GO:0009536 )	comp	<a href="#">IDA</a>	plastid	<a href="#">Publication:501790244 PMID:32612621</a>
	AT3G58990	<a href="#">chloroplast stroma</a> ( GO:0009570 )	comp	<a href="#">IDA</a>	chloroplast   plastid	<a href="#">Publication:501738361 PMID:20663849</a>
	AT3G58990	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">HDA</a>	chloroplast	<a href="#">Publication:501761766 PMID:25293756</a>
	AT3G58990	<a href="#">leucine biosynthetic process</a> ( GO:0009098 )	proc	<a href="#">IEA</a>	other cellular processes   other metabolic processes   biosynthetic process	<a href="#">AnalysisReference:501757242</a>
	AT3G58990	<a href="#">3-isopropylmalate dehydratase activity</a> ( GO:0003861 )	func	<a href="#">IDA</a>	catalytic activity	<a href="#">Publication:501738361 PMID:20663849</a>
	AT3G58990.1	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>
<a href="#">AT5G23010</a>	AT5G23010.1	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">HDA</a>	chloroplast	<a href="#">Publication:501724486 PMID:18431481</a>
	AT5G23010	<a href="#">glucosinolate biosynthetic process</a> ( GO:0019761 )	proc	<a href="#">IDA</a>	biosynthetic process   other metabolic processes   secondary metabolic	<a href="#">Publication:1546017 PMID:11706188</a>

				process   other cellular processes		
AT5G23010	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">IBA</a>	chloroplast	<a href="#">Communication:501741973</a>	NA 09/10/2021 00:00:00
AT5G23010	<a href="#">glucosinolate biosynthetic process</a> ( GO:0019761 )	proc	<a href="#">IMP</a>	secondary metabolic process   biosynthetic process   other metabolic processes   other cellular processes	<a href="#">Publication:501675982</a>	<a href="#">TAIR</a> 12/20/2017 00:00:00
AT5G23010	<a href="#">2-(2'-methylthio)ethylmalate synthase activity</a> ( GO:0010177 )	func	<a href="#">IDA</a>	transferase activity	<a href="#">Publication:501711739 PMID:14740211</a>	<a href="#">TAIR</a> 10/02/2006 00:00:00
AT5G23010.3	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
AT5G23010	<a href="#">carboxylic acid metabolic process</a> ( GO:0019752 )	proc	<a href="#">IEA</a>	other cellular processes   other metabolic processes	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00
AT5G23010	<a href="#">response to water deprivation</a> ( GO:0009414 )	proc	<a href="#">IEP</a>	response to stress   response to chemical   response to abiotic stimulus	<a href="#">Publication:501752730 PMID:23144921</a>	<a href="#">TAIR</a> 02/07/2013 00:00:00
AT5G23010	<a href="#">glucosinolate biosynthetic process</a> ( GO:0019761 )	proc	<a href="#">IMP</a>	other cellular processes   biosynthetic process   other metabolic processes   secondary metabolic process	<a href="#">Publication:1546017 PMID:11706188</a>	<a href="#">TAIR</a> 10/13/2003 00:00:00
AT5G23010.1	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
AT5G23010.2	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
AT5G23010	<a href="#">glucosinolate biosynthetic process</a> ( GO:0019761 )	proc	<a href="#">IGI</a>	biosynthetic process   other metabolic processes   other cellular processes   secondary metabolic process	<a href="#">Publication:501712434 PMID:15155874</a>	NA 03/07/2006 00:00:00
AT5G23010	<a href="#">leucine biosynthetic process</a> ( GO:0009098 )	proc	<a href="#">IBA</a>	other cellular processes   biosynthetic process   other metabolic processes	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00

	AT5G23010	<a href="#">response to insect</a> ( GO:0009625 )	proc	<a href="#">IEP</a>	response to biotic stimulus   response to external stimulus	<a href="#">Publication:501752730 PMID:23144921</a>	<a href="#">TAIR</a> 02/07/2013 00:00:00
	AT5G23010	<a href="#">acyltransferase activity, acyl groups converted into alkyl on transfer</a> ( GO:0046912 )	func	<a href="#">IEA</a>	transferase activity	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00
	AT5G23010	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISS</a>	chloroplast	<a href="#">Publication:1546017 PMID:11706188</a>	<a href="#">TAIR</a> 10/13/2003 00:00:00
<a href="#">AT4G25760</a>	AT4G25760.1	<a href="#">nucleus</a> ( GO:0005634 )	comp	<a href="#">ISM</a>	nucleus	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
	AT4G25760	<a href="#">regulation of amino acid export</a> ( GO:0080143 )	proc	<a href="#">IMP</a>	other cellular processes   transport	<a href="#">Publication:501735673 PMID:20018597</a>	NA 01/25/2010 00:00:00
	AT4G25760	<a href="#">molecular function unknown</a> ( GO:0003674 )	func	<a href="#">ND</a>	unknown molecular functions	<a href="#">Communication:1345790</a>	<a href="#">TIGR</a> 10/04/2003 00:00:00
<a href="#">AT5G49630</a>	AT5G49630	<a href="#">aspartate transmembrane transport</a> ( GO:0015810 )	proc	<a href="#">IDA</a>	transport   other cellular processes	<a href="#">Publication:501681878 PMID:12148530</a>	<a href="#">TAIR</a> 06/12/2006 00:00:00
	AT5G49630	<a href="#">amino acid transmembrane transport</a> ( GO:0003333 )	proc	<a href="#">IBA</a>	transport   other cellular processes	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT5G49630	<a href="#">amino acid transmembrane transporter activity</a> ( GO:0015171 )	func	<a href="#">ISS</a>	transporter activity	<a href="#">Communication:1674994</a>	<a href="#">TAIR</a> 07/04/2007 00:00:00
	AT5G49630	<a href="#">neutral L-amino acid transmembrane transporter activity</a> ( GO:0015175 )	func	<a href="#">IDA</a>	transporter activity	<a href="#">Publication:501681878 PMID:12148530</a>	<a href="#">TAIR</a> 06/12/2006 00:00:00
	AT5G49630	<a href="#">tryptophan transport</a> ( GO:0015827 )	proc	<a href="#">IDA</a>	transport	<a href="#">Publication:501681878 PMID:12148530</a>	<a href="#">TAIR</a> 06/12/2006 00:00:00
	AT5G49630	<a href="#">acidic amino acid transmembrane transporter activity</a> ( GO:0015172 )	func	<a href="#">IDA</a>	transporter activity	<a href="#">Publication:501681878 PMID:12148530</a>	<a href="#">TAIR</a> 06/12/2006 00:00:00
	AT5G49630	<a href="#">neutral L-amino acid transmembrane transporter activity</a> ( GO:0015175 )	func	<a href="#">IBA</a>	transporter activity	<a href="#">Communication:501741973</a>	NA 11/23/2022 00:00:00
	AT5G49630	<a href="#">membrane</a> ( GO:0016020 )	comp	<a href="#">IBA</a>	other membranes	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT5G49630	<a href="#">acidic amino acid transmembrane transporter activity</a> ( GO:0015172 )	func	<a href="#">IBA</a>	transporter activity	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT5G49630	<a href="#">acidic amino acid transport</a> ( GO:0015800 )	proc	<a href="#">IBA</a>	transport	<a href="#">Communication:501741973</a>	NA 01/14/2023 00:00:00
<a href="#">AT3G15990</a>	AT3G15990	<a href="#">neutral amino acid transport</a> ( GO:0015804 )	proc	<a href="#">IBA</a>	transport	<a href="#">Communication:501741973</a>	NA 04/20/2022 00:00:00
	AT3G15990	<a href="#">phosphate ion transport</a> ( GO:0006817 )	proc	<a href="#">IDA</a>	transport	<a href="#">Publication:501786963 PMID:31610248</a>	<a href="#">TAIR</a> 10/27/2019 00:00:00

	AT3G15990.1	<a href="#">plasmodesma</a> ( GO:0009506 )	comp	<a href="#">HDA</a>	other cellular components	<a href="#">Publication:501742898 PMID:21533090</a>	NA 04/07/2021 00:00:00
	AT3G15990	<a href="#">plasma membrane</a> ( GO:0005886 )	comp	<a href="#">IDA</a>	plasma membrane	<a href="#">Publication:501786963 PMID:31610248</a>	<a href="#">TAIR</a> 10/27/2019 00:00:00
	AT3G15990	<a href="#">sulfate transmembrane transporter activity</a> ( GO:0015116 )	func	<a href="#">ISS</a>	transporter activity	<a href="#">Communication:1674994</a>	<a href="#">TAIR</a> 03/29/2003 00:00:00
	AT3G15990	<a href="#">transporter activity</a> ( GO:0005215 )	func	<a href="#">IDA</a>	transporter activity	<a href="#">Publication:501786963 PMID:31610248</a>	<a href="#">TAIR</a> 10/27/2019 00:00:00
	AT3G15990	<a href="#">secondary active sulfate transmembrane transporter activity</a> ( GO:0008271 )	func	<a href="#">IEA</a>	transporter activity	<a href="#">AnalysisReference:501756966</a>	NA 09/23/2023 00:00:00
<a href="#">AT2G41220</a>	AT2G41220	<a href="#">glutamate biosynthetic process</a> ( GO:0006537 )	proc	<a href="#">IBA</a>	other metabolic processes   biosynthetic process   other cellular processes	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT2G41220	<a href="#">plastid</a> ( GO:0009536 )	comp	<a href="#">HDA</a>	plastid	<a href="#">Publication:501750648 PMID:22923678</a>	NA 04/07/2021 00:00:00
	AT2G41220	<a href="#">glutamate synthase (NADH) activity</a> ( GO:0016040 )	func	<a href="#">IBA</a>	catalytic activity	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT2G41220.1	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">HDA</a>	chloroplast	<a href="#">Publication:501724486 PMID:18431481</a>	NA 04/07/2021 00:00:00
	AT2G41220	<a href="#">glutamate synthase (ferredoxin) activity</a> ( GO:0016041 )	func	<a href="#">ISS</a>	catalytic activity	<a href="#">Publication:2574 PMID:9596633</a>	<a href="#">TAIR</a> 02/10/2004 00:00:00
	AT2G41220.1	<a href="#">chloroplast envelope</a> ( GO:0009941 )	comp	<a href="#">HDA</a>	other intracellular components   plastid   chloroplast	<a href="#">Publication:501710686 PMID:12938931</a>	NA 04/07/2021 00:00:00
	AT2G41220	<a href="#">ammonia assimilation cycle</a> ( GO:0019676 )	proc	<a href="#">IBA</a>	other metabolic processes   other cellular processes	<a href="#">Communication:501741973</a>	NA 06/07/2023 00:00:00
	AT2G41220	<a href="#">L-glutamate biosynthetic process</a> ( GO:0097054 )	proc	<a href="#">IEA</a>	other cellular processes   other metabolic processes   biosynthetic process	<a href="#">AnalysisReference:501757242</a>	NA 09/23/2023 00:00:00
	AT2G41220.1	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">ISM</a>	chloroplast	<a href="#">AnalysisReference:501780126</a>	NA 08/31/2018 00:00:00
	AT2G41220	<a href="#">chloroplast</a> ( GO:0009507 )	comp	<a href="#">HDA</a>	chloroplast	<a href="#">Publication:501761766 PMID:25293756</a>	NA 04/04/2019 00:00:00

