

# Report for Analysis tools Review

### Administrative

This report is intend for reviewer of the pathway analysis:https://reactome.org/PathwayBrowser/#/DTAB=AN&ANALYSIS=MjAxNzEyMTgwNjM0MDJfMjl%3D(please note that this URL maybe out of date because of the token can expired at our server end) and your input identifiers are: O95831, Q8IWV1, Q13214, P35716, O43692.... It has been automatically generated in Reactome version 63 at 10:00 02-01-2018.

### Introduction

Each reaction (pathway event) is represented here by a simple diagram. Input molecules are shown as labelled boxes (left side) connected by plain lines to a central square. Arrowed lines connect the central square to the output molecules (right side). If relevant, catalyst molecules are represented above the central square, connected to it by a red arrowed line. Input molecules that are also the catalyst (e.g. signaling or enzyme/substrate complexes) are shown on the left and joined to the central node by a red arrowed line. The names of reactions that precede/follow in the pathway are shown as text on the far left/far right respectively.

Summary text may appear to be overlapping or redundant. Please remember that this document is extracted from multiple pages on the Reactome website, this redundancy is useful to provide context for users who might first arrive at a mid-point in the pathway. Suggestions for improvement are welcome.

Reactome represents human biology. Literature references that demonstrate the occurrence of the reaction in humans are given preference, they are not intended to provide a historical record. Unfortunately we do not have the resources to identify all relevant references, but we are happy to cite any that you feel should be included. In your review, we would appreciate it if you could verify that the events that we describe (pathways and reactions) are annotated clearly and that the molecular details of the reactions are accurate.

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A more detailed representation of the pathway as a diagram can be found on our website. We would appreciate your feedback on the content and navigability of the website. A short tutorial of the Pathway Browser can be found at the top of the webpage. The zoomable pathway diagram is interactive. Text descriptions are revealed in the panel below the diagram under the Overview tab. To view a text description, select a participating molecule or reaction node in the diagram. Clicking on an event in the hierarchy in the left panel will highlight the event(s) in the diagram and a text description will be displayed in the panel below

Take a look at our's literature for more information:

The Reactome pathway Knowledgebase, Nucleic Acids Research, Volume 44, Issue D1, 4 January 2016, Pages D481–D487

Open Targets: a platform for therapeutic target identification and validation, Nucleic Acids Research, Volume 45, Issue D1, 4 January 2017, Pages D985–D994

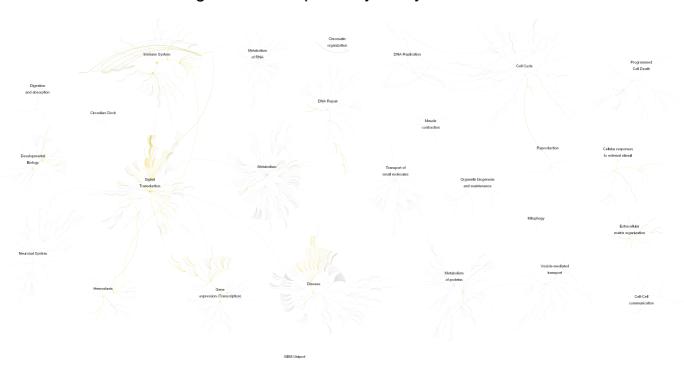
Reactome enhanced pathway visualization, Bioinformatics, Volume 33, Issue 21, 1 November 2017, Pages 3461–3467

### Summary

1. 164 of 184 identifiers you submitted was Found in Reactome.

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- 2. 924 pathways was hit in Reactome total {} pathways.
- 3. 1 of top Enhanced/Overrepresented pathways was list based on p-Value.
- 4. The "fireworks" diagram for this pathway analysis:



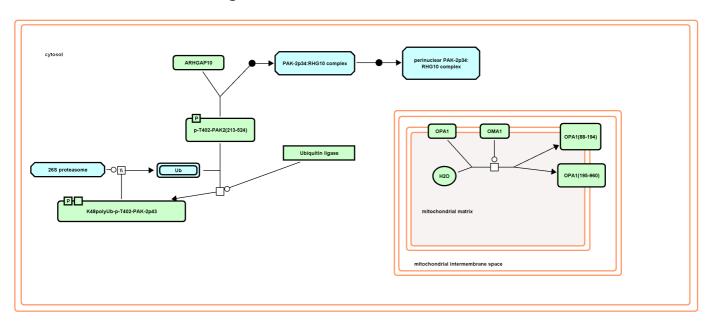
## Overview

1. Top 1 Overrepresentation pathways sorted by p-Value.

Pathway name	Entities found	Entities Total	Entities ratio	Entities pValue	Entities FDR	Reactions found	Reactions total	Reactions ratio	Species name
Diseases of signal transduction	50	467	0.0345	1.11022e-16	2.84217e-14	225	297	0.0265	Homo sapiens

## 2. Pathway details.

## 2.1. Diseases of signal transduction



#### Summation

species name:Homo sapiens,Signaling processes are central to human physiology (e.g., Pires-da Silva & Sommer 2003), and their disruption by either germ-line and somatic mutation can lead to serious disease. Here, the molecular consequences of mutations affecting visual signal transduction and signaling by diverse growth factors are annotated.

### List of identifiers was found at this pathway

P01111	P04626	P01116	P37173	P27986	P21860
Q00987	P42345	P42224	P46940	P21802	P40763
P60484	P49815	P35568	Q06124	P55211	P16234
P11274	P07900	P00533	O15164	P02751	P42336
P46531	P22681	Q15465	P10721	P09619	Q09472
P11362	Q13485	Q7Z5R6	Q14738	P35222	O43524
P98177	P05106	Q969H0	P08581	P78504	

#### **Authors**

D'Eustachio, Peter, 2015-01-15

#### **Editors**

Shorser, Solomon, 2016-11-07

#### References

"The evolution of signalling pathways in animal development", Nat. Rev. Genet., 4,2003, 39-49.

### 3. Identifiers was found.

Identifiers	mapsTo	Resource	Identifiers	mapsTo	Resource
P51587	P51587	UNIPROT	P37275	P37275	UNIPROT
P28329	P28329	UNIPROT	Q06124	Q06124	UNIPROT
P20810	P20810	UNIPROT	Q96GD4	Q96GD4	UNIPROT
O14746	O14746	UNIPROT	P09619	P09619	UNIPROT
O14757	O14757	UNIPROT	Q96L34	Q96L34	UNIPROT
Q6NUQ1	Q6NUQ1	UNIPROT	P28336	P28336	UNIPROT
Q9C040	Q9C040	UNIPROT	P40692	P40692	UNIPROT
O00300	O00300	UNIPROT	Q14185	Q14185	UNIPROT
Q99758	Q99758	UNIPROT	Q09472	Q09472	UNIPROT
P11274	P11274	UNIPROT	P01011	P01011	UNIPROT
P35222	P35222	UNIPROT	Q01974	Q01974	UNIPROT
P60484	P60484	UNIPROT	O43474	O43474	UNIPROT
P49454	P49454	UNIPROT	O00750	O00750	UNIPROT
P01023	P01023	UNIPROT	P49674	P49674	UNIPROT
O00533	O00533	UNIPROT	Q9UPN9	Q9UPN9	UNIPROT
O75382	O75382	UNIPROT	P49815	P49815	UNIPROT
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Identifiers	mapsTo	Resource	Identifiers	mapsTo	Resource
Q13126	Q13126	UNIPROT	P04921	P04921	UNIPROT
·	P46531	UNIPROT			
P46531			P00533	P00533	UNIPROT
Q9HAU5	Q9HAU5	UNIPROT	Q9UNL4	Q9UNL4	UNIPROT
Q13145	Q13145	UNIPROT	P63092	P63092, Q5JWF2	UNIPROT
P36543	P36543	UNIPROT	P49619	P49619	UNIPROT
Q13164	Q13164	UNIPROT	O43524	O43524	UNIPROT
P12110	P12110	UNIPROT	P63096	P63096	UNIPROT
P00338	P00338	UNIPROT	P02751	P02751	UNIPROT
P98177	P98177-1, P98177-2	UNIPROT	Q15119	Q15119	UNIPROT
O15066	O15066	UNIPROT	P02788	P02788	UNIPROT
Q96L91	Q96L91	UNIPROT	P42345	P42345	UNIPROT
P04083	P04083	UNIPROT	P08684	P08684	UNIPROT
P46940	P46940	UNIPROT	Q92574	Q92574	UNIPROT
P09544	P09544	UNIPROT	P42336	P42336	UNIPROT
O15264	O15264	UNIPROT	Q13535	Q13535	UNIPROT
P29590	P29590	UNIPROT	P21860	P21860-1	UNIPROT
P55211	P55211	UNIPROT	Q13315	Q13315	UNIPROT
P78504	P78504	UNIPROT	O15439	O15439	UNIPROT
Q05513	Q05513	UNIPROT	P78527	P78527	UNIPROT
Q9Y4A5	Q9Y4A5	UNIPROT	P21675	P21675	UNIPROT
Q99490	Q99490	UNIPROT	P21802	P21802, P21802- 18, P21802-1, P21802-17, P21802-5, P21802-3	UNIPROT
Q9UJS0	Q9UJS0	UNIPROT	P16234	P16234	UNIPROT
O15528	O15528	UNIPROT	O15524	O15524	UNIPROT
Q9NRY4	Q9NRY4	UNIPROT	O14686	O14686	UNIPROT
P06400	P06400	UNIPROT	Q8WYB5	Q8WYB5	UNIPROT
P56945	P56945	UNIPROT	P10721	P10721	UNIPROT
Q9BZL6	Q9BZL6	UNIPROT	P16035	P16035	UNIPROT
P42771	Q8N726	UNIPROT	P05106	P05106	UNIPROT
P05107	P05107	UNIPROT	O43184	O43184	UNIPROT
P09958	P09958	UNIPROT	Q7Z5R6	Q7Z5R6	UNIPROT
P37173	P37173	UNIPROT	P06213	P06213	UNIPROT
P02452	P02452	UNIPROT	P07900	P07900	UNIPROT
P04637	P04637	UNIPROT	P15529	P15529	UNIPROT
P11168	P11168	UNIPROT	P17948	P17948	UNIPROT

Identifiers	mapsTo	Resource	Identifiers	mapsTo	Resource
P01116	P01116	UNIPROT	P27986	P27986	UNIPROT
P01111	P01111	UNIPROT	Q9Y561	Q9Y561	UNIPROT
P52735	P52735	UNIPROT	O95299	O95299	UNIPROT
P11387	P11387	UNIPROT	P02461	P02461	UNIPROT
P04626	P04626	UNIPROT	P10071	P10071	UNIPROT
Q969H0	Q969H0-4, Q969H0-1	UNIPROT	P07948	P07948	UNIPROT
P05771	P05771	UNIPROT	P40763	P40763	UNIPROT
O60934	O60934	UNIPROT	Q99435	Q99435	UNIPROT
Q00987	Q00987	UNIPROT	Q9UHD2	Q9UHD2	UNIPROT
P27540	P27540	UNIPROT	Q13485	Q13485	UNIPROT
Q96HY7	Q96HY7	UNIPROT	Q16760	Q16760	UNIPROT
P11309	P11309	UNIPROT	P22681	P22681	UNIPROT
P51812	P51812	UNIPROT	Q02548	Q02548	UNIPROT
P08151	P08151	UNIPROT	P09486	P09486	UNIPROT
P23771	P23771	UNIPROT	O15164	O15164	UNIPROT
Q15465	Q15465	UNIPROT	P04843	P04843	UNIPROT
P35568	P35568	UNIPROT	P54278	P54278	UNIPROT
P14859	P14859	UNIPROT	P82987	P82987	UNIPROT
Q9NQC7	Q9NQC7	UNIPROT	Q86UP2	Q86UP2	UNIPROT
P11362	P11362, P11362- 19, P11362-1	UNIPROT	Q13635	Q13635	UNIPROT
P42224	P42224	UNIPROT	Q9UHW9	Q9UHW9	UNIPROT
O43602	O43602	UNIPROT	Q14738	Q14738	UNIPROT
Q99081	Q99081	UNIPROT	P52292	P52292	UNIPROT
P09668	P09668	UNIPROT	P29474	P29474	UNIPROT
P35916	P35916	UNIPROT	Q13418	Q13418	UNIPROT
P17252	P17252	UNIPROT	O15151	O15151	UNIPROT
Q03001	Q03001-3	UNIPROT	Q05655	Q05655	UNIPROT
P30291	P30291	UNIPROT	P42262	P42262	UNIPROT
P08123	P08123	UNIPROT	Q13444	Q13444	UNIPROT
Q07812	Q07812	UNIPROT	P10415	P10415	UNIPROT
O60346	O60346	UNIPROT	P08581	P08581	UNIPROT
P24821	P24821	UNIPROT	P45984	P45984	UNIPROT

## 4. Identifiers was not found.

Identifiers							
O95831	Q8IWV1	Q13214	P35716	O43692	P08922		
Q16799	Q8IZT6	Q06455	Q9H0K1	Q9H1R3	Q8TF68		
Q9BXK5	Q9NRP7	Q6ZWH5	Q01543	Q92786	P04198		

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Identifiers							
Q32MQ5	P08247						