

**MARRVEL1.1**

Human Search Model Organisms Search About FAQ Feedback API Gene symbol Variant Search

**INPUT Variant**  
Gene NOTCH1

**DATABASES**  
OMIM ExAC / Geno2MP ClinVar DGV

**MODEL ORGANISMS**  
Predicted Orthologs Protein Domain Protein Alignment

New search

**Gene Function Table**  
NOTCH1

Show only best DIOPt score gene

**Step 3.1.3**

Homolog	DIOPt Score	Expression	Molecular function	Cellular component	Biological process
Human	NOTCH1	• adrenal gland • appendix • colon • gallbladder • lung • rectum • stomach • testis <a href="#">Show all / GTEx</a>	• protein binding	• MAML1-RBP-Jkappa-ICN1 complex • receptor complex	• aortic valve morphogenesis • pulmonary valve morphogenesis • mitral valve formation • Notch signaling pathway • heart development <a href="#">Show 16 more</a>
Rat	Notch1	11/11 <a href="#">Show all (10)</a>	No term based on experiment	• acrosomal vesicle • nucleus • Golgi apparatus • plasma membrane	• positive regulation of neuroblast proliferation • regulation of cardioblast proliferation • Notch signaling pathway • positive regulation of transcription of Notch receptor target • spermatogenesis <a href="#">Show 13 more</a>
Mouse	Notch1	13/13 <a href="#">Show 18 more</a>	• extraembryonic component • embryo ectoderm • embryo mesoderm • cardiovascular system • branchial arches <a href="#">Show 18 more</a>	• core promoter binding • transcriptional activator activity, RNA polymerase II transcription factor binding • chromatin binding • transcription factor activity, sequence-specific DNA binding • enzyme inhibitor activity	• nucleus • cytoplasm • endoplasmic reticulum • adherens junction • cell surface
					• negative regulation of transcription from RNA polymerase II promoter • in utero embryonic development • cell fate specification • epithelial to mesenchymal

**Step 3.1.1**

**Step 3.1.2**

**Step 3.1.4**

**Step 3.1.5**

**Step 3.1.6**

An arrow points from the NOTCH1 entry in the Human row to the "Monarch" button under the "Homolog" column for Human. Another arrow points from the NOTCH1 entry in the Mouse row to the "IMPC" button under the "Homolog" column for Mouse.