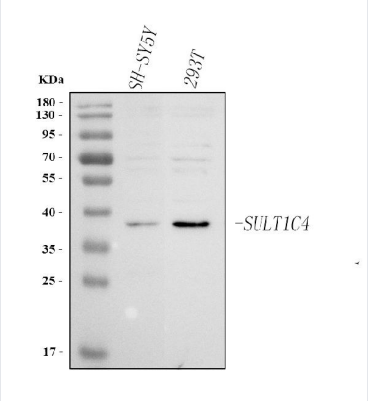
# SULT1C4 Antibody – Rabbit Polyclonal

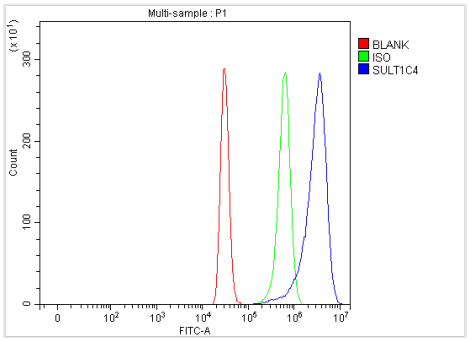
## PRODUCT OVERVIEW

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| **Product Name** | SULT1C4, Polyclonal Antibody |
| **Full Product Name** | Anti-SULT1C4 Antibody Picoband |
| **Product Gene Name** | anti-SULT1C4 antibody |
| **Product Synonym Names** | Aquaporin-6; NOVA alternative splicing regulator 2; RNA-binding protein Nova-2; Astrocytic NOVA1-like RNA-binding protein; Neuro-oncological ventral antigen 2; NOVA2; ANOVA; NOVA3 |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Host** | Rabbit |
| **Species Reactivity** | Human |
| **Form/Format** | Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4. |
| **Purity/Purification** | Immunogen affinity purified. |
| **Specificity** | Brain. Expression restricted to astrocytes. |
| **Preparation and Storage** | At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing. |
| **Molecular Weight** | 26,841 Da |
| **OMIM** | 608357 |
| **3D Structure** | ModBase 3D Structure for O75897 |
| **Immunogen** | E coli-derived human SULT1C4 recombinant protein (Position: M1-F302). |
| **Subcellular Localization** | Nucleus |
| **Reconstitution** | Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml. |
| **Cross Reactivity** | No cross-reactivity with other proteins. |
| **Protein Function** | May regulate RNA splicing or metabolism in a specific subset of developing neurons. Binds single strand RNA. |
| **Product Categories/Family for anti-SULT1C4 antibody** | Primary Antibodies; Channels; Metabolism; Plasma Membrane; Signal Transduction |
| **ISO Certification** | Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory. |
| **Applications Tested/Suitable for anti-SULT1C4 antibody** | Western Blot (WB), Flow Cytometry (FC/FACS), ELISA (EIA) |
| **Application Notes for anti-SULT1C4 antibody** | WB: 0.25-0.5ug/ml, Human<br>FC/FACS (Fixed): 1-3ug/1x$10^6$ cells, Human<br>ELISA: 0.1-0.5ug/ml |
| **Related Product Information for anti-SULT1C4 antibody** | The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance. |

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| **Product References and Citations for anti-SULT1C4 antibody** | 1. Freimuth, R. R., Raftogianis, R. B., Wood, T. C., Moon, E., Kim, U.-J., Xu, J., Siciliano, M. J., Weinshilboum, R. M. Human sulfotransferases SULT1C1 and SULT1C2: cDNA characterization, gene cloning, and chromosomal localization. Genomics 65: 157-165, 2000. 2. Sakakibara, Y., Yanagisawa, K., Katafuchi, J., Ringer, D. P., Takami, Y., Nakayama, T., Suiko, M., Liu, M.-C. Molecular cloning, expression, and characterization of novel human SULT1C sulfotransferases that catalyze the sulfonation of N-hydroxy-2-acetylaminofluorene. J. Biol. Chem. 273: 33929-33935, 1998. |
| **Other Notes** | Small volumes of anti-SULT1C4 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply. |
| **Searchable Terms for SULT1C4 purchase** | MBS1759137 is an antibody targeting SULT1C4. Also known as Anti-SULT1C4 Antibody Picoband. Reactive in Human. Host: Rabbit. |




**Western Blot (WB) of anti-SULT1C4 antibody**
Figure 1. Western blot analysis of SULT1C4 using anti-SULT1C4 antibody (MBS1759137).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: human SH-SY5Y whole cell lysates,Lane 2: human 293T whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SULT1C4 antigen affinity purified polyclonal antibody (#MBS1759137) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (#MBS176460) with Tanon 5200 system. A specific band was detected for SULT1C4 at approximately 38 kDa. The expected band size for SULT1C4 is at 38 kDa.




**Flow Cytometry (FC/FACS) of anti-SULT1C4 antibody**
Figure 2. Flow Cytometry analysis of HepG2 cells using anti-SULT1C4 antibody (MBS1759137).Overlay histogram showing HepG2 cells stained with MBS1759137 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-SULT1C4 Antibody (MBS1759137, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (MBS177405, 5-10ug/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

## ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for SULT1C4. It may not necessarily be applicable to this product.

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| **NCBI GI #** | 28830308 |
| **NCBI GeneID** | 27233 |
| **NCBI Accession #** | NP_006579.2 |
| **UniProt Primary Accession #** | O75897 |
| **UniProt Secondary Accession #** | Q069I8; Q08AS5; Q53S63 |
| **UniProt Related Accession #** | O75897 |
| **GenBank Nucleotide #** | NM_006588.2 |
| **NCBI Official Full Name** | sulfotransferase 1C4 |
| **NCBI Official Synonym Full Names** | sulfotransferase family, cytosolic, 1C, member 4 |
| **NCBI Official Symbol** | SULT1C4 |
| **NCBI Official Synonym Symbols** | SULT1C; SULT1C2 |

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| **UniProt Protein Name** | Sulfotransferase 1C4 |
| **UniProt Synonym Protein Names** | Sulfotransferase 1C2; SULT1C#2 |
| **Protein Family** | Sulfotransferase |
| **UniProt Gene Name** | SULT1C4 |
| **UniProt Synonym Gene Names** | SULT1C2; ST1C4; SULT1C#2 |
| **UniProt Entry Name** | ST1C4_HUMAN |
| **NCBI Protein Information** | sulfotransferase 1C4; ST1C4; SULT1C#2; sulfotransferase 1C2; sulfotransferase family, cytosolic, 1C, member 2; sulfotransferase family, cytosolic, 1C, member C2 |
| **NCBI Summary for SULT1C4** | Sulfotransferase enzymes catalyze the sulfate conjugation of many hormones, neurotransmitters, drugs, and xenobiotic compounds. These cytosolic enzymes are different in their tissue distributions and substrate specificities. The gene structure (number and length of exons) is similar among family members. This gene encodes a protein that belongs to the SULT1 subfamily, responsible for transferring a sulfo moiety from PAPS to phenol-containing compounds. [provided by RefSeq, Jul 2008] |
| **UniProt Comments for SULT1C4** | SULT1C4: Sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) as sulfonate donor to catalyze the sulfate conjugation of drugs, xenobiotic compounds, hormones, and neurotransmitters. May be involved in the activation of carcinogenic hyroxylamines. Shows activity towards p-nitrophenol and N-hydroxy-2-acetylamino-fluorene (N-OH-2AAF). Belongs to the sulfotransferase 1 family.<br><br>Protein type: EC 2.8.2.-; Transferase<br><br>Chromosomal Location of Human Ortholog: 2q12.3<br><br>Cellular Component: cytosol<br><br>Molecular Function: sulfotransferase activity<br><br>Biological Process: xenobiotic metabolic process; sulfation; 3'-phosphoadenosine 5'-phosphosulfate metabolic process |
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