10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DR6 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody
Catalog # ABV11514

Specification

DR6 Polyclonal Antibody - Product Information

Application	**WB**
Primary Accession	O75509
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**71845**

DR6 Polyclonal Antibody - Additional Information

Gene ID 27242

Other Names
Tumor necrosis factor receptor superfamily member 21, Death receptor 6, CD358, TNFRSF21, DR6

Target/Specificity
DR6

Formulation
100 µg (0.5 mg/ml) immunoaffinity purified rabbit anti-DR6 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

Handling
The antibody solution should be gently mixed before use.

Background Descriptions

Precautions
DR6 Polyclonal Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

DR6 Polyclonal Antibody - Protein Information

Name TNFRSF21

Synonyms DR6

Function
Promotes apoptosis, possibly via a pathway that involves the activation of NF-kappa-B. Can also promote apoptosis mediated by BAX and by the release of cytochrome c from the mitochondria into the cytoplasm. Plays a role in neuronal apoptosis, including apoptosis in response to amyloid peptides derived from APP, and is required for both normal cell body death and axonal pruning.

Trophic-factor deprivation triggers the cleavage of surface APP by beta-secretase to release sAPP-beta which is further cleaved to release an N-terminal fragment of APP (N-APP). N-APP binds TNFRSF21; this triggers caspase activation and degeneration of both neuronal cell bodies (via caspase-3) and axons (via caspase-6). Negatively regulates oligodendrocyte survival, maturation and myelination. Plays a role in signaling cascades triggered by stimulation of T-cell receptors, in the adaptive immune response and in the regulation of T-cell differentiation and proliferation. Negatively regulates T-cell responses and the release of cytokines such as IL4, IL5, IL10, IL13 and IFNG by Th2 cells. Negatively regulates the production of IgG, IgM and IgM in response to antigens. May inhibit the activation of JNK in response to T-cell stimulation. Also acts as a regulator of pyroptosis: recruits CASP8 in response to reactive oxygen species (ROS) and subsequent oxidation, leading to activation of GSDMC (PubMed:34012073).

Cellular Location
Cell membrane; Single-pass type I membrane protein Note=Endocytosed following oxidation in response to reactive oxygen species (ROS).

Tissue Location
Detected in fetal spinal cord and in brain neurons, with higher levels in brain from Alzheimer disease patients (at protein level). Highly expressed in heart, brain, placenta, pancreas, lymph node, thymus and prostate. Detected at lower levels in lung, skeletal muscle, kidney, testis, uterus, small intestine, colon, spleen, bone marrow and fetal liver. Very low levels were found in adult liver and peripheral blood leukocytes.

DR6 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DR6 Polyclonal Antibody - Images

DR6 Polyclonal Antibody - Background

Apoptosis is induced by certain cytokines including TNF and Fas ligand of the TNF family through their death domain containing receptors, TNF-R1 and Fas. Several novel death receptor including DR3, DR4, and DR5 were recently identified. A new death domain containing receptor in the TNFR family was cloned recently and termed DR6 for death receptor 6. Like TNF-R1, DR6 interacts with death domain containing adapter molecule TRADD. Overexpression of DR6 induces apoptosis and activates NF-kB and JNK. DR6 is widely expressed in human tissues and cell lines.