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

DR6 Antibody

Catalog # ASC10076

Product Information

Application	WB, E
Primary Accession	O75509
Other Accession	AF068868, 3549262
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	71845
Conjugate	Unconjugated
Application Notes	DR6 antibody can be used for detection of DR6 by Western blot at 1:500 dilution. An approximately 68 kDa band can be detected.

Additional Information

Gene ID	27242
Other Names	DR6 Antibody: DR6, CD358, BM-018, DR6, UNQ437/PRO868, Tumor necrosis factor receptor superfamily member 21, Death receptor 6, tumor necrosis factor receptor superfamily, member 21
Target/Specificity	TNFRSF21;
Reconstitution & Storage	DR6 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	DR6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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. 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). 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.

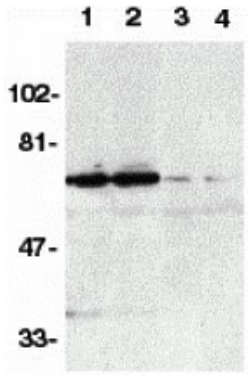
Background

DR6 Antibody: 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 receptors 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-κB and JNK. DR6 is widely expressed in human tissues and cell lines. The ligand for DR6 has not been identified.

References

Pan G, Bauer JH, Haridas V, Wang S, Liu D, Yu G, Vincenz C, Aggarwal BB, Ni J, Dixit VM. Identification and functional characterization of DR6, a novel death domain-containing TNF receptor. FEBS Lett 1998;431:351-6

Images



Western blot analysis of DR6 in K562 (1,3) and Raji (2,4) whole cell lysate in the absence (1,2) or presence (3,4) of blocking peptide with DR6 antibody at 1:500 dilution.