

**DR6 Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV10172****Specification**

---

**DR6 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q9EPU5</a>
Other Accession	<a href="#">EDL23398.1</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	71983

**DR6 Antibody - Additional Information****Gene ID** 94185**Application & Usage****Western blotting (0.5-4 µg/ml). However, the optimal conditions should be determined individually. The antibody detects ~68 kDa of DR6 in samples from human, mouse and rat origins.****Other Names**

Death Receptor 6, DR-6, DR 6

**Target/Specificity**

DR6

**Antibody Form**

Liquid

**Appearance**

Colorless liquid

**Formulation**

100 µg (0.5 mg/ml) antigen affinity purified rabbit anti-DR6 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol and 0.01% Thimerosal.

**Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage**

-20 °C

**Background Descriptions****Precautions**

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

## DR6 Antibody - Protein Information

**Name** Tnfrsf21

**Synonyms** Dr6

### Function

Promotes apoptosis, possibly via a pathway that involves the activation of NF-kappa-B (PubMed:<a href="http://www.uniprot.org/citations/11485735" target="\_blank">11485735</a>, PubMed:<a href="http://www.uniprot.org/citations/11714751" target="\_blank">11714751</a>, PubMed:<a href="http://www.uniprot.org/citations/12515813" target="\_blank">12515813</a>, PubMed:<a href="http://www.uniprot.org/citations/19225519" target="\_blank">19225519</a>, PubMed:<a href="http://www.uniprot.org/citations/21725297" target="\_blank">21725297</a>, PubMed:<a href="http://www.uniprot.org/citations/23559013" target="\_blank">23559013</a>). Can also promote apoptosis mediated by BAX and by the release of cytochrome c from the mitochondria into the cytoplasm (By similarity). 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 (PubMed:<a href="http://www.uniprot.org/citations/19225519" target="\_blank">19225519</a>). 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) (PubMed:<a href="http://www.uniprot.org/citations/23559013" target="\_blank">23559013</a>). N-APP binds TNFRSF21; this triggers caspase activation and degeneration of both neuronal cell bodies (via caspase-3) and axons (via caspase-6) (PubMed:<a href="http://www.uniprot.org/citations/23559013" target="\_blank">23559013</a>). Negatively regulates oligodendrocyte survival, maturation and myelination (PubMed:<a href="http://www.uniprot.org/citations/21725297" target="\_blank">21725297</a>). 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 (By similarity). Negatively regulates T-cell responses and the release of cytokines such as IL4, IL5, IL10, IL13 and IFNG by Th2 cells (By similarity). Negatively regulates the production of IgG, IgM and IgM in response to antigens (By similarity). May inhibit the activation of JNK in response to T-cell stimulation (By similarity). Also acts as a regulator of pyroptosis: recruits CASP8 in response to reactive oxygen species (ROS) and subsequent oxidation, leading to activation of GSDMC (By similarity).

### Cellular Location

Cell membrane; Single-pass type I membrane protein Note=Endocytosed following oxidation in response to reactive oxygen species (ROS). {ECO:0000250|UniProtKB:O75509}

### Tissue Location

Detected in spleen B-cells (at protein level). Ubiquitous. Highly expressed in adult spleen, thymus, testis, prostate, ovary, small intestine, colon, brain, lung and kidney, and in fetal brain, liver and lung. Detected at lower levels in adult peripheral blood leukocytes, lung, and in fetal muscle, heart, kidney, small intestine and skin. Detected in T-cells, B-cells and monocytes. In T- cells expression is highest in Th0 cells, intermediate in Th2 cells and lower in Th1 cells. Expressed at low levels in proliferating progenitors in the spinal cord, but is highly expressed by differentiating neurons within the spinal cord and adjacent dorsal root ganglia. Expressed by developing neurons as they differentiate and enter a pro-apoptotic state. Expressed by both cell bodies and axons

## DR6 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 Cytometry](#)
- [Cell Culture](#)

#### **DR6 Antibody - Images**

#### **DR6 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 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- $\kappa$ B and JNK. DR6 is widely expressed in human tissues and cell lines.