Human DR6/TNFRSF21 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF144

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human DR6 in ELISAs and Western blots. In sandwich ELISAs, less than 0.2% cross-reactivity with recombinant human (rh) OPG and rhTNF RII is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human DR6 Gln42-Leu350 Accession # O75509
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human DR6/TNFRSF21 Fc Chimera (Catalog # 144-DR)
Human DR6/TNFRSF21 Sandwich Immunoassay		**Reagent**
ELISA Capture	0.2-0.8 µg/mL	Human DR6/TNFRSF21 Antibody (Catalog # AF144)
ELISA Detection	0.1-0.4 µg/mL	Human DR6/TNFRSF21 Biotinylated Antibody (Catalog # BAF144)
Standard		Recombinant Human DR6/TNFRSF21 Fc Chimera (Catalog # 144-DR)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Death Receptor 6 (DR6), also known as TNFRSF21 and CD358, is a type I transmembrane protein in the TNF receptor superfamily (1). Human DR6 consists of a 308 amino acid (aa) extracellular domain (ECD) with four cysteine-rich motifs, a 21 aa transmembrane segment, and a 285 aa palmitylated cytoplasmic region that contains one death domain (2, 3). Within the ECD, human and mouse DR6 share 82% aa sequence identity. DR6 is expressed as an approximately 110 kDa molecule that carries extensive N-linked and O-linked glycosylation in its extracellular region (3, 4). Among hematopoietic cells, DR6 is expressed on monocytes, resting $CD4^+$ T cells, and pro-, pre-, and naïve B cells (5 - 7). DR6 knockout mice exhibit a Th2-biased immune response characterized by exaggerated Th2 and B cell responsiveness in combination with reduced Th1 cell responsiveness and inflammatory leukocyte infiltration (6 - 9). DR6 knockout mice are resistant to induced airway inflammation and experimental autoimmune encephalitis but more susceptible to severe graft versus host disease (9 - 11). DR6 is also expressed on developing neurons where it can bind a shed 35 kDa N-terminal fragment of APP or a fragment of APLP2 (12, 13). This APP fragment is generated following deprivation of neurotrophic factors, and its binding to DR6 triggers DR6-mediated axonal pruning (12). DR6 is constitutively expressed on some prostate cancer cells and can be induced by TNF-α on others (3, 4).

References:

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