Mouse TRAIL/TNFSF10 Alexa Fluor® 405-conjugated Antibody

Monoclonal Rat IgG_{2A} Clone # 170533

Catalog Number: FAB1121V

100 µg

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse TRAIL/TNFSF10 in direct ELISAs and Western blots. Does not cross-react with recombinant human (rh) APRIL, rhBAFF, recombinant mouse (rm) BAFF, rhEDA-A2, rmEDA, rhFas Ligand, rmFas Ligand, rhGITR Ligand, rhLIGHT, rhOX40 Ligand, cotton ra
Source	Monoclonal Rat IgG_{2A} Clone # 170533
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant mouse TRAIL/TNFSF10 Pro118-Asn291 Accession # P50592
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.*

ELISA Capture (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
ELISA Detection (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

TNF-related apoptosis-inducing ligand (TRAIL), also called apoptosis 2 ligand (Apo2L) for its similarity in sequence, structure, and function to Fas Ligand/Apo1L, is a 33-35 kDa type II transmembrane glycoprotein of the tumor necrosis factor superfamily, designated TNFSF10 (1-3). Mouse TRAIL cDNA encodes a 17 amino acid (aa) N-terminal intracellular domain, a 20 aa transmembrane domain and a 253 aa extracellular domain. Like most TNF family members, TRAIL is bioactive as a homotrimer (1). Unlike other TNF family members, a zinc ion complexed by human Cys 230 (mouse Cys 240) of each of the three monomers is critical for structural stability (4, 5). Either transmembrane or cysteine protease-released soluble sTRAIL induce apoptosis of many transformed cell lines, but rarely of normal cells (3, 6). Accordingly, TRAIL is suggested to have a role in tumor surveillance (1). Mice with genetically disrupted TRAIL have defective thymocyte apoptosis, creating faulty negative selection and some increased susceptibility to induced autoimmune diseases (7). In humans, TRAIL controls apoptosis of erythrocyte precursors and sTRAIL is inversely correlated with hemoglobin (1, 8). TRAIL transcripts are constitutively expressed in a variety of human (and presumably mouse) tissues and mononuclear cells (2, 3). Only one of two receptors that transduce apoptotic signals in humans is found in the mouse (TRAIL R2/DR5 but not TRAIL R1/DR4) (1). Mice express TRAIL receptors DcTRAIL R1/TNFRSF23 and DcTRAIL R2/TNFRSF22. These receptors lack death domains, but differ in structure from human regulatory receptors TRAIL R3 and TRAIL R4 (9). Osteoprotegerin has been identified in humans as a TRAIL receptor, but binding in mouse has not yet been demonstrated (1, 10). Mouse TRAIL shows 85% aa identity with rat TRAIL and 70% aa identity with human, bovine, and porcine TRAIL within the TNF homology domain (aa 118-291).

PRODUCT SPECIFIC NOTICES

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