

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TROY/TNFRSF19 in direct ELISAs. Stains human TROY/TNFRSF19 transfectants but not irrelevant transfectants in flow cytometry.
Source	Monoclonal Mouse IgG ₁ Clone # 933202
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human TROY/TNFRSF19 Glu30-Leu170 Accession # Q9NS68
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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.

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10 ⁶ cells	HEK293 human embryonic kidney cell line transfected with human TROY/TNFRSF19

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

TROY (also known as TAJ and TNFRSF19) is a 45-55 kDa member of the TNF receptor superfamily of molecules (1-4). It is widely expressed in the embryo, but shows limited expression in adult. In particular, embryonic TROY is found in embryonic epithelium, neural tube, and mesenchyme, and developing neurons of the hippocampus and thalamus (5, 6). In the adult, TROY is found in the nervous system associated with dorsal root and retinal ganglia neurons, astrocytes, and microglia, and in hair follicles where it is expressed by dermal papilla matrix cells (4, 7, 8, 9). In human, TROY has also been found on melanoma cells, not normal melanocytes (10). TROY is reportedly a component of the Nogo-A receptor, taking the place of p75 in a membrane-bound LINGO-1:NgR1:TROY complex (6, 8, 9). This complex purportedly mediates axon repulsion initiated by one of five myelin-associated inhibitory factors (OMpg; CD100; Ephrin B3; Nogo-A; MAG) (6, 11). In the hair follicle, TROY binds LTα and acts with Eda to drive secondary hair follicle development (4, 12). Mature human TROY is a 394 amino acid (aa) type I transmembrane protein (1-3). It possesses a 141 aa extracellular region (aa 30-170) that contains three 40 aa TNFR cysteine motifs, and an extended 232 aa cytoplasmic domain (aa 192-423). There is one potential isoform that shows a two aa substitution for aa 416-423. The extracellular domains of human and mouse TROY share 90% aa identity.

References:

1. Hu, S. *et al.* (1999) *Genomics* **62**:103.
2. Eby, M.T. *et al.* (2000) *J. Biol. Chem.* **275**:15336.
3. Kojima, T. *et al.* (2000) *J. Biol. Chem.* **275**:20742.
4. Hashimoto, T. *et al.* (2008) *Cell Cycle* **7**:106.
5. Pispas, J. *et al.* (2003) *Gene Exp. Patterns* **3**:675.
6. Mi, S. (2008) *Cytokine Growth Factor Rev.* **19**:245.
7. Satoh, J. *et al.* (2007) *Neuropathol. Appl. Neurobiol.* **33**:99.
8. Shao, Z. *et al.* (2005) *Neuron* **45**:353.
9. Park, J.B. *et al.* (2000) *Neuron* **45**:345.
10. Spanjaard, R.A. *et al.* (2007) *Int. J. Cancer* **120**:1304.
11. Venkatesh, K. *et al.* (2007) *J. Cell Biol.* **177**:393.
12. Pispas, J. *et al.* (2008) *Hum. Mol. Genet.* **17**:3380.

Human TROY/TNFRSF19 Alexa Fluor® 647-conjugated Antibody

Monoclonal Mouse IgG₁ Clone # 933202

Catalog Number: FAB15481R

100 µg

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.