

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse TROY/TNFRSF19 in ELISAs and Western blots. In sandwich immunoassays, less than 2% cross-reactivity with recombinant human (rh) TAJ is observed and less than 0.2% cross-reactivity with recombinant mouse (rm) EDAR, rmCD27, rmFas, rmRANK, rmTNF RI, and rmTNF RII is observed. In Western blots, approximately 5% cross-reactivity with rmCD27 and rmEDAR is observed and less than 1% cross-reactivity with rhTNF RI, rhTNF RII, rmOPG, rmRANK, rmCD30, rmCD40, rm4-1BB, rmFas, and rmGITR (under non-reducing conditions) is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant mouse TROY/TNFRSF19 Glu30-Leu170 Accession # Q9JLL3
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. 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
<b>Western Blot</b>	0.1 µg/mL	Recombinant Mouse TROY/TNFRSF19 Fc Chimera (Catalog # 723-TR)
<b>Immunohistochemistry</b>	5-15 µg/mL	Perfusion fixed frozen sections of mouse brain (cortex)
<b>Mouse TROY/TNFRSF19 Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	0.2-0.8 µg/mL	Mouse TROY/TNFRSF19 Antibody (Catalog # AF723)
<b>ELISA Detection</b>	0.1-0.4 µg/mL	Mouse TROY/TNFRSF19 Biotinylated Antibody (Catalog # BAF723)
<b>Standard</b>		Recombinant Mouse TROY/TNFRSF19 Fc Chimera (Catalog # 723-TR)

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

TROY, also named Toxicity and JNK inducer (TAJ) and TNFRSF19, is a novel member of the tumor necrosis factor receptor superfamily. The protein putatively encoded by the TROY mRNA is a 416 amino acid (aa) residue type I membrane protein with a 29 aa signal peptide, a 141 aa extracellular domain, a 23 aa transmembrane domain and a 223 aa cytoplasmic domain. Splice variants of mouse TROY (lacking the transmembrane and cytoplasmic domains or with only a 21 aa cytoplasmic tail), have also been identified. Like other members of the TNFRSF, TROY contains characteristic cysteine-rich motifs in the extracellular domain. The cytoplasmic domain of TROY does not have the death domain present in some TNFRSF members, but does contain a major TRAF2 (tumor necrosis factor receptor-associated factor 2)-binding consensus sequence. Mouse TROY shares 92% aa sequence identity with human TROY in their extracellular domains. The two proteins also have 57% homology in their cytoplasmic tails. Among TNFRSF members, TROY is most related to Edar, sharing 33% identity in the extracellular domain. Over-expression of TROY has been reported to activate nuclear factor NFκB and c-Jun N-terminal kinase (JNK) pathways. TROY mRNA is exclusively expressed in the epithelia of various tissues in mouse day 13.5 embryos. In neonatal mice, expression of TROY is predominantly in hair follicles and in neuron-like cells in the cerebrum.

## References:

1. Kojima, T. *et al.* (2000) *J. Biol. Chem.* **275**:20742.
2. Eby, M.T. *et al.* (2000) *J. Biol. Chem.* **275**:15336.
3. Hu, S. *et al.* (1999) *Genomics* **62**:103.