OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for AM26311PU-N

Trem1 Rat Monoclonal Antibody [Clone ID: L5-B8]

Product data:

Product Type:	Primary Antibodies
Clone Name:	L5-B8
Applications:	FN, IF, WB
Recommended Dilution:	Flow cytometry: The typical starting working dilution is 1:50. Functional assays. Immunoflourescence. Western blot: The typical starting working dilution is 1:50. Not suitable for Immunohistochemistry on paraffin sections.
Reactivity:	Mouse
Host:	Rat
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Mouse TREM-1-human IgG-Fc fusion protein
Specificity:	The monoclonal antibody L5-B8 recognizes mouse triggering receptor expressed on myeloid cells-1 (TREM-1). TREM-1 is a 30 kDa monomeric transmembrane activating receptor.
Formulation:	PBS State: Purified State: Liquid 0.2 µm filtered Ig fraction Stabilizer: 0.1% bovine serum albumin
Concentration:	lot specific
Purification:	Protein G
Conjugation:	Unconjugated
Storage:	Store at 2 - 8 °C.
Stability:	Shelf life: one year from despatch.
Gene Name:	triggering receptor expressed on myeloid cells 1
Database Link:	Entrez Gene 58217 Mouse Q9JKE2

View online »

Background:

TREM-1 is a 30 kDa monomeric transmembrane activating receptor. TREM-1 is a member of the immunoglobulin superfamily. TREM-1 is expressed at low levels in the early development of the hematopoietic system in the promonoistic stage, and at high levels on the surface of immune cells, including neutrophils, monocytes and macrofages. TREM-1 is synthesized as a 234 amino acid (aa) precursor with a signal peptide (16 aa), an extracellular domain (184 aa), a transmembrane domain (29 aa), and a short cytoplasmic domain (5 aa). The short intracellular domain associates with a signal-transduction molecule, DNAX-activation protein 12 (DAP12), triggering the secretion of inflammatory cytokines that amplify the host response to microbial agents. TREM-1 acts in synergy with Toll-like receptor signaling pathways in amplifying the inflammatory response. Platelets express a natural ligand for TREM-1.
The expression of TREM-1 is greatly upregulated on phagocytic cells in the presence of bacteria and fungi. TREM-1 has a role in sepsis, inflammatory bowel disease (IBD) and multiple sclerosis. In contrast, TREM-1 is not upregulated in samples from patients with non-inefctious inflammatory conditions. During infections, receptor expression is modulated and soluble TREM-1 (sTREM-1, 17 kDa) is released. TREM-1 is shed from the membrane of activated phagocytes and can be found as sTREM-<1 in> body fluids like plasma and bronchoalveolar lavage fluid (BAL).
Elavated levels of sTREM-1 have a accuracy and sensitivity in detecting microbial infections as underlying disease. Furthermore, sTREM-1 has been associated with non-infectious inflammatory conditions like major abdominal surgery, peptic ulcer disease and COPD.

Synonyms:

TREM-1