



Rabbit Anti-Human TREM-2 monoclonal antibody, clone 27 (CABT-L4573)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	A DNA sequence encoding the extracellular domain of human TREM2(aa 1-174) was expressed, fused with a polyhistidine tag at the C-terminus.
Specificity	Human TREM-2
Immunogen	Recombinant Human TREM-2
Source/Host	Rabbit
Species Reactivity	Human
Clone	27
Purification	Protein A affinity chromatography
Conjugate	Unconjugated
Applications	ELISA (Cap). We recommend the following for sandwich ELISA (Capture - Detection): CABT-L4573 - CABT-L4574
Format	Liquid
Concentration	Lot specific
Size	100 µl
Buffer	PBS
Preservative	None

Storage	Store -20°C for long term.
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Ship	Wet ice
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BACKGROUND

Introduction

Triggering receptor expressed on myeloid cells 2 (TREM2) is a single Ig domain receptor. It is expressed on macrophages and dendritic cells but not on granulocytes or monocytes. Its expression is most abundant in the basal ganglia, corpus callosum, medulla oblongata and spinal cord, and microglial cells are the major TREM2-producing cell type in the central nervous system (CNS). TREM2 may play a role in chronic inflammations and may stimulate production of constitutive rather than inflammatory chemokines and cytokines. TREM2 forms a receptor signaling complex with TYROBP and triggers activation of the immune responses in macrophages and dendritic cells. It also associates with the signal adapter protein, DAP12, which has a cytoplasmic ITAM, leading to the subsequent activation of cytoplasmic tyrosine kinases. TREM2 is both required and sufficient for competent uptake of apoptotic neuronal cells. TREM2 and TREM2-L form a receptor-ligand pair connecting microglia with apoptotic neurons, directing removal of damaged cells to allow repair. Deficiency of the adapter protein DAP12 or its associated receptor TREM2 is associated with abnormal osteoclast development in humans. Defects in TREM2 are causes of PLOSL, also known as NHD. In addition, TREM2 signaling is also an important pathway to promote healing of wounds in the colon where stem cell replacement is necessary.

Keywords

TREM-2;Trem2a;Trem2b;Trem2c;triggering receptor expressed on myeloid cells 2