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DAP12 Blocking Peptide
Catalog # PBV10492b

Specification

DAP12 Blocking Peptide - Product Information

Primary Accession	O54885
Other Accession	AAD09438
Gene ID	22177
Calculated MW	12367

DAP12 Blocking Peptide - Additional Information

Gene ID 22177

Application & Usage	**The peptide is used for blocking the antibody activity of DAP-12. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30-60 minutes at 37°C.**

Other Names
TYRO protein tyrosine kinase-binding protein, DNAX-activation protein 12, Killer-activating receptor-associated protein, KAR-associated protein, Tyrobp, Dap12, Karap

Target/Specificity
DAP12

Formulation
50 µg (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
DAP12 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

DAP12 Blocking Peptide - Protein Information

Name Tyrobp {ECO:0000312|MGI:MGI:1277211}

Function
Adapter protein which non-covalently associates with activating receptors found on the surface of a variety of immune cells to mediate signaling and cell activation following ligand binding by the

receptors (PubMed:15471863, PubMed:9647200). TYROBP is tyrosine- phosphorylated in the ITAM domain following ligand binding by the associated receptors which leads to activation of additional tyrosine kinases and subsequent cell activation (PubMed:15728241, PubMed:16715077). Also has an inhibitory role in some cells (PubMed:21727189). Non-covalently associates with activating receptors of the CD300 family to mediate cell activation (By similarity). Also mediates cell activation through association with activating receptors of the CD200R family (PubMed:15471863). Required for neutrophil activation mediated by integrin (PubMed:17086186). Required for the activation of myeloid cells mediated by the CLEC5A/MDL1 receptor (By similarity). Associates with natural killer (NK) cell receptors such as the KLRD1/KLRC2 heterodimer to mediate NK cell activation (By similarity). Also associates non-covalently with the NK cell receptors KLRA4/LY49D and KLRA8/LY49H which leads to NK cell activation (PubMed:9647200). Associates with TREM1 to mediate activation of neutrophils and monocytes (By similarity). Associates with TREM2 on monocyte-derived dendritic cells to mediate up-regulation of chemokine receptor CCR7 and dendritic cell maturation and survival (By similarity). Association with TREM2 mediates cytokine-induced formation of multinucleated giant cells which are formed by the fusion of macrophages (PubMed:18957693). Stabilizes the TREM2 C-terminal fragment (TREM2-CTF) which is produced by TREM2 ectodomain shedding (By similarity). In microglia, required with TREM2 for phagocytosis of apoptotic neurons (PubMed:15728241). Required with ITGAM/CD11B in microglia to control production of microglial superoxide ions which promote the neuronal apoptosis that occurs during brain development (PubMed:18685038). Promotes pro-inflammatory responses in microglia following nerve injury which accelerates degeneration of injured neurons (PubMed:25690660). Positively regulates the expression of the IRAK3/IRAK-M kinase and IL10 production by liver dendritic cells and inhibits their T cell allostimulatory ability (PubMed:21257958). Negatively regulates B cell proliferation (PubMed:21727189). Required for CSF1-mediated osteoclast cytoskeletal organization (PubMed:18691974). Positively regulates multinucleation during osteoclast development (PubMed:12569157, PubMed:14969392).

Cellular Location
Cell membrane; Single-pass type I membrane protein

Tissue Location
Expressed on microglia (at protein level) (PubMed:12569157, PubMed:18685038). Expressed on oligodendrocytes (at protein level) (PubMed:12569157). Expressed on macrophages and osteoclasts (PubMed:14969392). Expressed on dendritic cells in liver, spleen, kidney and lung with highest levels in liver dendritic cells (PubMed:21257958).

DAP12 Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DAP12 Blocking Peptide - Images