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LILRB2 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant LILRB2.
Catalog # AT2716a

Product Information

Application	WB, E
Primary Accession	Q8N423
Other Accession	BC036827
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	1D4
Calculated MW	65005

Additional Information

Gene ID	10288
Other Names	Leukocyte immunoglobulin-like receptor subfamily B member 2, LIR-2, Leukocyte immunoglobulin-like receptor 2, CD85 antigen-like family member D, Immunoglobulin-like transcript 4, ILT-4, Monocyte/macrophage immunoglobulin-like receptor 10, MIR-10, CD85d, LILRB2, ILT4, LIR2, MIR10
Target/Specificity	LILRB2 (AAH36827, 22 a.a. ~ 598 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	LILRB2 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

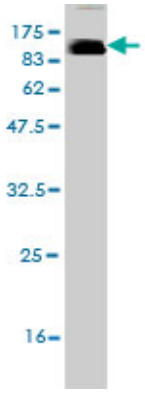
Background

This gene is a member of the leukocyte immunoglobulin-like receptor (LIR) family, which is found in a gene cluster at chromosomal region 19q13.4. The encoded protein belongs to the subfamily B class of LIR receptors which contain two or four extracellular immunoglobulin domains, a transmembrane domain, and two to four cytoplasmic immunoreceptor tyrosine-based inhibitory motifs (ITIMs). The receptor is expressed on immune cells where it binds to MHC class I molecules on antigen-presenting cells and transduces a negative signal that inhibits stimulation of an immune response. It is thought to control inflammatory responses and cytotoxicity to help focus the immune response and limit autoreactivity. Multiple transcript variants encoding different isoforms have been found for this gene.

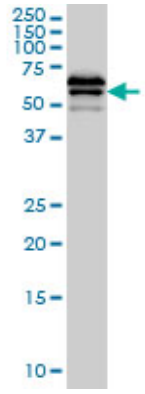
References

Differentiation of type 1 T regulatory cells (Tr1) by tolerogenic DC-10 requires the IL-10-dependent ILT4/HLA-G pathway. Gregori S, et al. Blood, 2010 Aug 12. PMID 20448110.The inhibitory receptor LILRB4 (ILT3) modulates antigen presenting cell phenotype and, along with LILRB2 (ILT4), is upregulated in response to Salmonella infection. Brown DP, et al. BMC Immunol, 2009 Oct 27. PMID 19860908.Alternative mRNA splicing creates transcripts encoding soluble proteins from most LILR genes. Jones DC, et al. Eur J Immunol, 2009 Nov. PMID 19658091.Tryptophan deprivation induces inhibitory receptors ILT3 and ILT4 on dendritic cells favoring the induction of human CD4+CD25+ Foxp3+ T regulatory cells. Brenk M, et al. J Immunol, 2009 Jul 1. PMID 19535644.Crystallization and preliminary X-ray analysis of the low-affinity complex between human leukocyte antigen-G (HLA-G) and leukocyte Ig-like receptor B2 (LILRB2). Shiroishi M, et al. Protein Pept Lett, 2009. PMID 19356145.

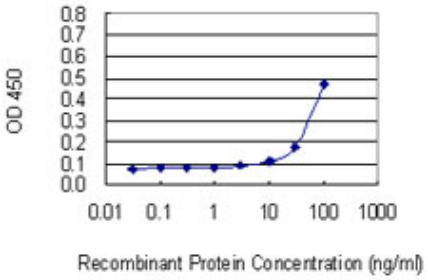
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (89.21 KDa) .



LILRB2 monoclonal antibody (M01), clone 1D4 Western Blot analysis of LILRB2 expression in Hela S3 NE ((Cat # AT2716a)



Detection limit for recombinant GST tagged LILRB2 is 3 ng/ml as a capture antibody.

Citations

- ILT4 drives B7-H3 expression via PI3K/AKT/mTOR signalling and ILT4/B7-H3 co-expression correlates with poor prognosis in non-small cell lung cancer.
- Co-expression of ILT4/HLA-G in human non-small cell lung cancer correlates with poor prognosis and ILT4-HLA-G interaction activates ERK signaling.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.