abcam

ab233827

Anti-TLL1 antibody [4H8C1]

Mouse Monoclonal TLL1 antibody. Suitable for Flow Cyt, WB and reacts with Human samples. Cited in 1 publication. Immunogen corresponding to Recombinant Fragment Protein within Human TLL1 aa 850 to C-terminus.

Image updates are in progress. Products remain available and covered by the Abcam Product Promise. Learn more.

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human TLL1 aa 850 to C-terminus. The exact immunogen used to generate this antibody is proprietary information. Database link O43897
Clone number	4H8C1
Purification technique	Affinity purification Protein G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human

Dilution info	1/200 - 1/400
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/500 - 1/2000
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Target data

See full target information TLL1

Function	Protease which processes procollagen C-propeptides, such as chordin, pro-biglycan and pro-lysyl oxidase. Required for the embryonic development. Predominant protease, which in the development, influences dorsal-ventral patterning and skeletogenesis.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks

Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	TLL1 also known as tolloid-like protein 1 is a metalloprotease with an approximate mass of 105 kDa. TLL1 belongs to the astacin family of zinc-dependent metalloproteinases. It cleaves specific protein substrates playing a critical role in tissue remodeling and development. This protein is mainly expressed in the heart lungs and skeletal tissue indicating its importance in these organs.
Biological function summary	The functions of tolloid-like protein 1 are essential for embryonic development particularly in heart morphogenesis. TLL1 forms part of a protein complex that regulates the activation of latent growth factors. It facilitates the maturation of certain extracellular matrix components by cleaving procollagen C-propeptides. Such activity is central to ensuring proper extracellular matrix organization and subsequent tissue integrity.
Pathways	The enzymatic actions of TLL1 integrate into critical signaling pathways such as the Transforming Growth Factor-beta (TGF-β) and Bone Morphogenetic Protein (BMP) signaling pathways. TLL1 modulates these pathways by processing various latent growth factors. It shares functional similarities with related proteins like BMP1 another known metalloprotease by orchestrating cellular communication and tissue formation processes which are vital for proper cellular events.
Associated diseases and disorders	Tolloid-like protein 1 has been associated with congenital heart defects due to its indispensable role in heart development. Mutations or malfunctions in TLL1 can lead to maladaptive morphogenesis of cardiac tissues. Moreover research indicates a link between TLL1 and fibrotic conditions. Alterations in its activity can disrupt normal tissue fibrosis processes and involve proteins like TGF-β leading to pathological fibrosis in tissues such as the heart and lungs.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

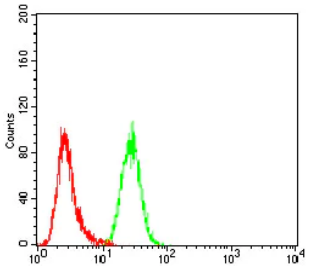
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1 product image



Flow Cytometry - Anti-TLL1 antibody [4H8C1] (ab233827)

TLL1 Flow Cytometry staining using mouse Anti-TLL1 antibody

Flow cytometric analysis of HeLa (human epithelial cell line from cervix adenocarcinoma) cell line labeling TLL1 with ab233827 at 1/200 dilution (green) compared with a negative control (red).

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