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LTBP4 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58310

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q8N2S1
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	173435
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human LTBP4
Epitope Specificity	151-250/1624
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Secreted, extracellular space, extracellular matrix.
SIMILARITY	Belongs to the LTBP family.Contains 16 EGF-like domains.Contains 4 TB (TGF-beta binding) domains.
SUBUNIT	Forms part of the large latent transforming growth factor beta precursor complex; removal is essential for activation of complex. Interacts with LTBP1 and TGFB1. Binds to FBN1 (By similarity).
Post-translational modifications	Contains hydroxylated asparagine residues (By similarity).
DISEASE	Defects in LTBP4 are the cause of Urban-Rifkin-Davis syndrome (URDS) [MIM:613177]; also known as Cutis laxa with severe pulmonary gastrointestinal and urinary abnormalities. URDS is a syndrome characterized by disrupted pulmonary, gastrointestinal, urinary, musculoskeletal, craniofacial and dermal development. Clinical features include cutis laxa, mild cardiovascular lesions, respiratory distress with cystic and atelectatic changes in the lungs, and diverticulosis, tortuosity and stenosis at various levels of the intestinal tract. Craniofacial features include microretrognathia, flat midface, receding forehead and wide fontanelles.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	May be involved in the assembly, secretion and targeting of TGFB1 to sites at which it is stored and/or activated. May play critical roles in controlling and directing the activity of TGFB1. May have a structural role in the extra cellular matrix (ECM).

Additional Information

Gene ID	8425
Other Names	Latent-transforming growth factor beta-binding protein 4, LTBP-4, LTBP4

Target/Specificity	Highly expressed in heart, skeletal muscle, pancreas, uterus, and small intestine. Weakly expressed in placenta and lung.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	LTBP4
Function	Key regulator of transforming growth factor beta (TGFB1, TGFB2 and TGFB3) that controls TGF-beta activation by maintaining it in a latent state during storage in extracellular space. Associates specifically via disulfide bonds with the Latency-associated peptide (LAP), which is the regulatory chain of TGF-beta, and regulates integrin-dependent activation of TGF-beta.
Cellular Location	Secreted, extracellular space, extracellular matrix
Tissue Location	Highly expressed in heart, skeletal muscle, pancreas, uterus, and small intestine. Weakly expressed in placenta and lung.