

TSG6 Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP51571

Product Information

Application	WB, IP, IHC-P
Primary Accession	P98066
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	31203

Additional Information

Gene ID	7130
Other Names	Tumor necrosis factor-inducible gene 6 protein, Hyaluronate-binding protein, TNF-stimulated gene 6 protein, TSG-6, Tumor necrosis factor alpha-induced protein 6, TNF alpha-induced protein 6, TNFAIP6, TSG6
Dilution	WB~~1:1000 IP~~N/A IHC-P~~N/A
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	TNFAIP6
Synonyms	TSG6
Function	<p>Major regulator of extracellular matrix organization during tissue remodeling (PubMed:15917224, PubMed:18042364, PubMed:26823460). Catalyzes the transfer of a heavy chain (HC) from inter-alpha-inhibitor (I-alpha-I) complex to hyaluronan. Cleaves the ester bond between the C-terminus of the HC and GalNAc residue of the chondroitin sulfate chain in I-alpha-I complex followed by transesterification of the HC to hyaluronan. In the process, potentiates the antiprotease function of I- alpha-I complex through release of free bikunin (PubMed:15917224, PubMed:16873769, PubMed:20463016). Acts as a catalyst in the formation of hyaluronan-HC oligomers and hyaluronan-rich matrix surrounding the cumulus cell-oocyte complex, a necessary step for oocyte fertilization (PubMed:26468290). Assembles hyaluronan in pericellular matrices that serve as platforms for receptor clustering and signaling. Enables binding of hyaluronan deposited on the surface of macrophages to LYVE1 on lymphatic endothelium and facilitates macrophage extravasation. Alters hyaluronan binding to</p>

functionally latent CD44 on vascular endothelium, switching CD44 into an active state that supports leukocyte rolling (PubMed:[15060082](#), PubMed:[26823460](#)). Modulates the interaction of chemokines with extracellular matrix components and proteoglycans on endothelial cell surface, likely preventing chemokine gradient formation (PubMed:[27044744](#)). In a negative feedback mechanism, may limit excessive neutrophil recruitment at inflammatory sites by antagonizing the association of CXCL8 with glycosaminoglycans on vascular endothelium (PubMed:[24501198](#)). Has a role in osteogenesis and bone remodeling. Inhibits BMP2-dependent differentiation of mesenchymal stem cell to osteoblasts (PubMed:[16771708](#), PubMed:[18586671](#)). Protects against bone erosion during inflammation by inhibiting TNFSF11/RANKL- dependent osteoclast activation (PubMed:[18586671](#)).

Cellular Location

Secreted.

Tissue Location

Expressed in airway epithelium and submucosal gland (at protein level). Colocalizes with bikunin at the ciliary border Present in bronchoalveolar lavage fluid (at protein level) (PubMed:16873769). Expressed in mesenchymal stem cells (PubMed:16771708). Found in the synovial fluid of patients with rheumatoid arthritis.

Background

Possibly involved in cell-cell and cell-matrix interactions during inflammation and tumorigenesis.

References

Lee T.H.,et al.J. Cell Biol. 116:545-557(1992).
Nentwich H.A.,et al.J. Biol. Chem. 277:15354-15362(2002).
Hillier L.W.,et al.Nature 434:724-731(2005).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Wisniewski H.-G.,et al.Biochemistry 33:7423-7429(1994).

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