

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse TSG-6 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 45% cross-reactivity with recombinant human TSG-6 is observed and less than 2% cross-reactivity with recombinant mouse TSG-14 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse TSG-6 Trp18-Leu275 Accession # O08859
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

TSG-6 (TNF-stimulated gene 6; also named TNFIP6) is a secreted, 35-39 kDa group A member of the LINK-Module superfamily of proteins (1-4). Mouse TSG-6 is synthesized as a 275 amino acid (aa) precursor. It contains a 17 aa signal sequence and a 258 aa mature region (5, 6). The mature region has an N-terminal link module (aa 36-129) and a C-terminal CUB (C1s/C1r; urchin embryonic growth factor; BMP1) domain (aa 135-246). Link modules bind hyaluronan (HA) and participate in extracellular matrix (ECM) assembly (7). Mature mouse TSG-6 shares 97%, 94% and 94% aa identity with rat, human and canine TSG-6, respectively. Cells reported to express TGF-6 include activated fibroblasts, synovocytes, chondrocytes, neutrophils, proximal tubular epithelium, bronchial epithelium, endothelium, and visceral plus vascular smooth muscle (2, 8). TSG-6 has multiple functions, many of which involve the ECM. It is suggested to stabilize HA-rich ECM. It does so by serving as an intermediary, or as a link between the individual subunits of the extracellular decameric pentraxin 3 and the surrounding hyaluronan matrix (9). It also provides structure and organization to hyaluronan. This is accomplished by a TSG-6 mediated transfer of an 80-85 kDa protein subunit from Ial (inter- α -inhibitor) to HA. Ial is a four-component, 225 kDa serine protease inhibitor. It contains a protease inhibitor subunit (bikunin), two independent, accompanying protein chains (HC1 and HC2), and a short chondroitin sulfate linking moiety. TSG-6 is a catalyst for the removal and transient binding of either HC chain. Each chain is subsequently transferred and covalently-linked to the surrounding HA. This provides substance and reinforcement to the ECM (1, 2, 10, 11, 12). This disassembly of Ial also leads to free bikunin, which in the "free" state becomes a potent inhibitor of serine proteases (8).

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