Mouse TSG-6 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF2326

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
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.

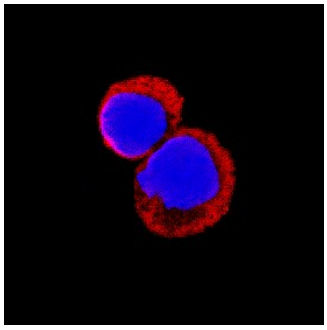
APPLICATIONS

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.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse TSG-6 (Catalog # 2326-TS)
Immunocytochemistry	5-15 µg/mL	See Below

DATA

Immunocytochemistry



TSG-6 in Mouse Splenocytes. TSG-6 was detected in immersion fixed mouse splenocytes using Goat Anti-Mouse TSG-6 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2326) at 15 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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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, synoviocytes, 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 IαI (inter-α-inhibitor) to HA. IαI is a four-component, 225 kDa serine protease inhibitor. It contains a protease inhibitor subunit (bikunin), two independent, accompaning 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 IαI also leads to free bikunin, which in the “free” state becomes a potent inhibitor of serine proteases (8).

References:

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