

DESCRIPTION

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|------------------------------|--|---|------------|---|
| Source | Chinese Hamster Ovary cell line, CHO-derived human TSPAN31 protein | | | |
| | MD | Human IgG ₁ (Pro100-Lys330) | IEGR | Human TSPAN31-LEL (Ser93-Lys173) Accession # Q12999.1 |
| | N-terminus | | C-terminus | |
| | | | | |
| N-terminal Sequence Analysis | Met | | | |
| Structure / Form | Disulfide-linked homodimer | | | |
| Predicted Molecular Mass | 36 kDa | | | |

SPECIFICATIONS

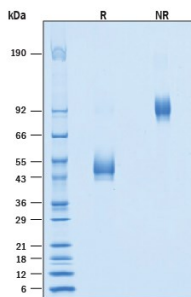
| | |
|------------------------|--|
| SDS-PAGE | 38-54 kDa, under reducing conditions |
| Activity | Bioassay data are not available. |
| Endotoxin Level | <0.10 EU per 1 µg of the protein by the LAL method. |
| Purity | >95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining. |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. |

PREPARATION AND STORAGE

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|--------------------------------|---|
| Reconstitution | Reconstitute at 500 µg/mL in PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. |
| Stability & Storage | <p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 3 months, -20 to -70 °C under sterile conditions after reconstitution. |

DATA

SDS-PAGE



Recombinant Human TSPAN31-LEL Fc Chimera Protein SDS-PAGE. 2 µg/lane of Recombinant Human TSPAN31-LEL Fc Chimera Protein (Catalog # 11553-TS) was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 38-54 kDa and 80-110 kDa, respectively.

BACKGROUND

Tetraspanin 31, or TSPAN31, belongs to a superfamily of proteins that is characterized by four transmembrane domains, three intracellular domains and two extracellular loops: a small extracellular loop (SEL) and a large extracellular loop (LEL). The extracellular loops form molecular webs that bring together cell surface proteins, facilitating the formation of stable and functional signalling complexes. Tetraspanins form microdomains on the plasma membrane that mediate diverse biological processes including adhesion, cell fusion, immune response, and tumor development (1-4). Human TSPAN31 consists of 210 amino acids, with the LEL region spanning residues 94-173. Within the LEL, human TSPAN31 shares 77% aa 74% aa sequence identity with mouse and rat TSPAN31-LEL, respectively.

References:

1. Charrin, S. *et al.* (2014) J. Cell Sci. **127**:3641.
2. Yang, J. *et al.* (2024) Cell. **13**:193.
3. Hemler, M.E. (2005) Nat. Rev. Mol. Cell Biol. **6**:801.
4. Kim, T-K. *et al.* (2015) Biochem. Biophys. Res. Commun. **468**:774.