

DESCRIPTION

Source	Human embryonic kidney cell, HEK293-derived human TSPAN14 protein			
	MD	Human IgG ₁ (Pro100-Lys330)	IEGR	Human TSPAN14-LEL (LEU114-Asn232) Accession # Q8NG11.1
	N-terminus			C-terminus
N-terminal Sequence Analysis	Met			
Structure / Form	Disulfide linked homodimer			
Predicted Molecular Mass	40 kDa			

SPECIFICATIONS

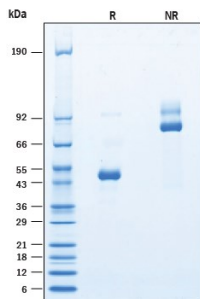
SDS-PAGE	43-54 kDa, under reducing conditions
Activity	Bioassay data are not available.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

PREPARATION AND STORAGE

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 TSPAN14-LEL Fc Chimera Protein SDS-PAGE. 2 µg/lane of Recombinant Human TSPAN14-LEL Fc Chimera Protein (Catalog # 11552-TS) was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 43-54 kDa and 90-110 kDa, respectively.

BACKGROUND

Tetraspanin 14, or TSPAN14, 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 TSPAN14 consists of 270 amino acids, with the LEL region spanning residues 114-232. Within the LEL, human TSPAN14 shares 98% aa sequence identity with mouse and rat TSPAN14-LEL.

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.