

DESCRIPTION

Target:	TSPAN7
Target aliases:	Tetraspanin 7, DXS1692E, TALLA-1, A15, Transmembrane 4 Superfamily Member 2, TM4SF2, CD231, MXS1, Membrane Component Chromosome X Surface Marker 1, Cell Surface Glycoprotein A15, Tetraspanin-7, CD231 Antigen
Fc isotype:	IgG2a
Membrane proteome specificity:	Monospecific for 6,000 membrane proteins tested
Species reactivity:	Human (Others untested)
Extracellular epitope:	Yes
Fc modifications:	C-terminal Avitag ¹ , disabled Fc-γ receptor binding ²
Source:	Recombinant CHO expression; purified by Protein A chromatography
Formulation:	Endotoxin Free PBS pH 7.4, sterile-filtered
Concentration:	1 mg/ml

1. A peptide tag that can be biotinylated in vitro using the biotin ligase enzyme (BirA).
2. Mutated Fc-γ receptor binding site to minimize non-specific antibody binding.

TSPAN7 TARGET INFORMATION

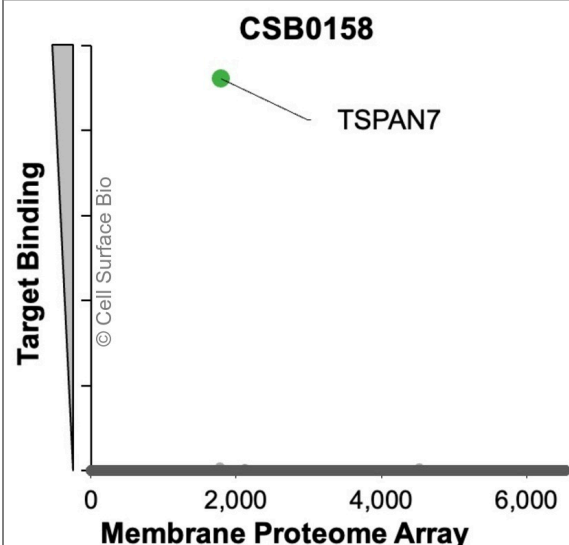
TSPAN7 is a member of the tetraspanin family, a group of small integral membrane proteins characterized by four transmembrane domains. It is involved in the organization of membrane microdomains and has roles in vesicular trafficking and cell signaling. TSPAN7 is primarily expressed in the brain, especially in neurons, and is associated with processes such as neurite outgrowth and synapse formation. The protein localizes to the plasma membrane and intracellular vesicles. (NCBI Gene: 7102, UniProtKB/Swiss-Prot: P41732) Other names: Tetraspanin 7, DXS1692E, TALLA-1, A15, Transmembrane 4 Superfamily Member 2, TM4SF2, CD231, MXS1, Membrane Component Chromosome X Surface Marker 1, Cell Surface Glycoprotein A15, Tetraspanin-7, CD231 Antigen

SHIPPING AND STORAGE

Shipping:	Shipped at ambient temperature. Store at 4°C.
Stability & Storage:	Stable for 12 months from date of receipt when stored at 4°C. Avoid repeated freeze-thaw cycles.

VALIDATION DATA

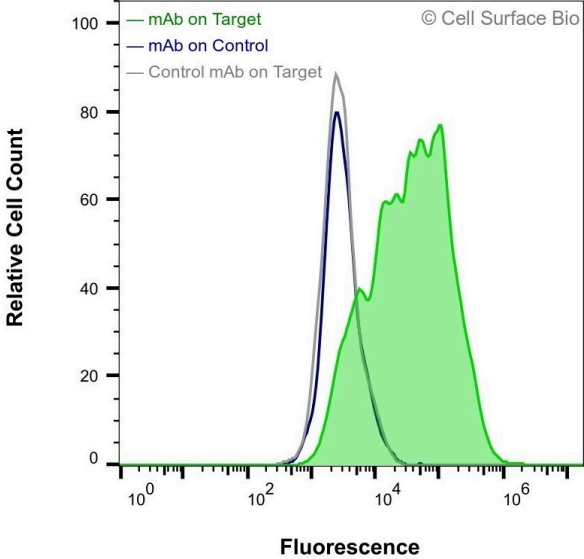
Membrane Proteome Specificity



The specificity of TSPAN7 Monoclonal Antibody (CSB0158) was tested on the Membrane Proteome Array™ and shown to be specific for TSPAN7.

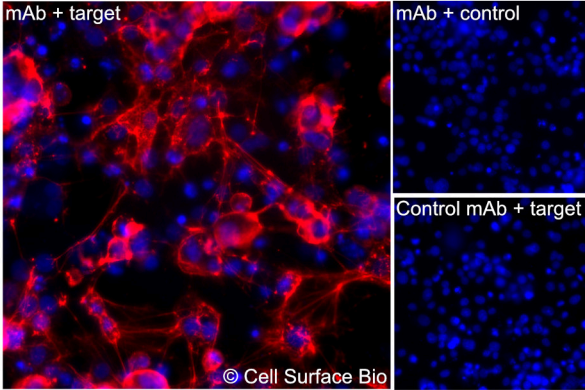
The Membrane Proteome Array™ contains 6,000 different human membrane proteins, each expressed in unfixed avian cells to ensure native conformation and post-translational modifications. The Membrane Proteome Array™ represents the industry standard for determining the binding specificity of antibodies and other protein ligands.

Applications	Conditions	Recommended concentration
Flow Cytometry, Extracellular	Live, Unpermeabilized	1 µg/ml



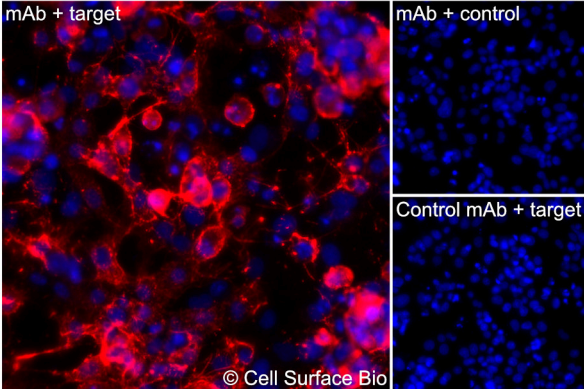
HEK-293F cells transiently transfected with TSPAN7 were stained with TSPAN7 Monoclonal Antibody (CSB0158)(green) or isotype control antibody (gray), followed by AlexaFluor 647- conjugated anti- IgG secondary antibody. HEK-293F cells transiently transfected with an empty control vector were also stained with TSPAN7 Monoclonal Antibody (CSB0158)(blue).

Applications	Conditions	Recommended concentration
Immunofluorescence, Extracellular	Fixed 4% paraformaldehyde	1 µg/ml



(Left) COS-7 cells transiently transfected TSPAN7 were stained with TSPAN7 Monoclonal Antibody (CSB0158) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) COS-7 cells transiently transfected with an empty control vector stained with TSPAN7 Monoclonal Antibody. (Bottom right) Isotype control: COS-7 cells transfected with TSPAN7 and stained with control MAb.

Applications	Conditions	Recommended concentration
Immunofluorescence, Intracellular	Fixed 4% paraformaldehyde, Permeabilized 0.1% Triton X-100	1 µg/ml



(Left) COS-7 cells transiently transfected TSPAN7 were permeabilized and stained with TSPAN7 Monoclonal Antibody (CSB0158) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) COS-7 cells transiently transfected with an empty control vector stained with TSPAN7 Monoclonal Antibody. (Bottom right) Isotype control: COS-7 cells transfected with {{target}} and stained with control MAb.