

TAPBPL (Q-12): sc-138660

BACKGROUND

TAPBPL (TAP binding protein-like), also known as TAPBPR or TAPBP-R, is a 468 amino acid protein that contains one Ig-like (immunoglobulin-like) C1-type domain and one Ig-like V-type domain. Localized to the membrane of both the endoplasmic reticulum (ER) and the microsome, TAPBPL is a single-pass type I membrane protein that is similar to TPN (also known as TAPBP or Tapasin), a transmembrane glycoprotein that belongs to the variable-constant Ig superfamily. TPN functions to link the ER-associated antigen transporter TAP with major histocompatibility complex (MHC) class I molecules, thereby mediating peptide loading onto MHC proteins. Due to its similarity with TPN, TAPBPL is thought to play a role in antigen processing events within the ER.

REFERENCES

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3. Herberg, J.A., et al. 1998. Genomic analysis of the Tapasin gene, located close to the TAP loci in the MHC. *Eur. J. Immunol.* 28: 459-467.
4. Mayer, W.E., et al. 2001. Is tapasin a modified Mhc class I molecule? *Immunogenetics* 53: 719-723.
5. Teng, M.S., et al. 2002. A human TAPBP (TAPASIN)-related gene, TAPBP-R. *Eur. J. Immunol.* 32: 1059-1068.
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7. Rizvi, S.M., et al. 2006. Direct peptide-regulatable interactions between MHC class I molecules and tapasin. *Proc. Natl. Acad. Sci. USA* 103: 18220-18225.
8. Chambers, J.E., et al. 2008. Formation of a major histocompatibility complex class I tapasin disulfide indicates a change in spatial organization of the peptide-loading complex during assembly. *J. Biol. Chem.* 283: 1862-1869.

CHROMOSOMAL LOCATION

Genetic locus: TAPBPL (human) mapping to 12p13.31.

SOURCE

TAPBPL (Q-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of TAPBPL of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138660 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TAPBPL (Q-12) is recommended for detection of TAPBPL of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TAPBPL (Q-12) is also recommended for detection of TAPBPL in additional species, including equine and bovine.

Suitable for use as control antibody for TAPBPL siRNA (h): sc-96046, TAPBPL shRNA Plasmid (h): sc-96046-SH and TAPBPL shRNA (h) Lentiviral Particles: sc-96046-V.

Molecular Weight of TAPBPL: 52 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.