Human TAPBPR Antibody

Monoclonal Mouse IgG_{2A} Clone # 1059329

Catalog Number: MAB11337

DESCRIPTION

Species Reactivity	Human
Specificity	Dectects human TAPBPR in direct ELISA.
Source	Monoclonal Mouse IgG_{2A} Clone # 1059329
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese Hamster Ovary cell line, CHO-derived human TAPBPR Ala19-Arg404 Accession # Q9BX59.2
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 either lyophilized or as a 0.2 μm filtered solution in PBS.

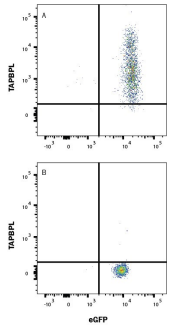
APPLICATIONS

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
Flow Cytometry	0.25 µg/10^6 cells	HEK293 cells transfected with Human TAPBL and eGFP vs irrelevant

DATA

Flow Cytometry



Detection of TAPBPR in HEK293 cell transfected with Human TAPBL and eGFP vs irrelevant cells by Flow Cytometry. HEK293 cells transfected with Human TAPBL and eGFP vs irrelevant were stained with eGFP and Mouse Anti-Human TAPBPR Monoclonal Antibody (A, B) (Catalog # MAB11337) followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). View our protocol for Staining Membrane-associated Proteins.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449

Human TAPBPR Antibody

Monoclonal Mouse IgG_{2A} Clone # 1059329
Catalog Number: MAB11337

BACKGROUND

TAP-binding protein-like (TAPBPL), also known as TAP binding protein-related (TAPBPR) and Tapasin-related protein (TAPASINR) is a transmembrane protein of the Immunoglobulin (Ig) superfamily (1, 2). TAPBPR was originally isolated as a homologue to TAPASIN but more recently was identified as a novel B7 family-related molecule since it shares sequence, structural, and functional similarities to B7 family members (3). Mature human TAPBPR consists of a lumenal domain containing an IgV and IgC domain, a transmembrane domain, and a cytoplasmic tail which lacks an ER retention motif. Within the lumenal domain, mature human TAPBPR shares 70% and 71% amino acid sequence identity with mouse and rat TAPBPR, respectively. Multiple alternatively spliced TAPBPR isoforms are known to exist with unique properties (4).TAPBPR is widely expressed and, similar to TAPASIN, functions as a both a chaperone protein and peptide editor of MHC class I, but in a peptide-loading complex (PLC) independent manner (5, 6). TAPBPR decreases the rate at which MHC class I molecules mature through the secretory pathway, a role which could be important for peptide selection by MHC class I molecules (7). TAPBPR is also expressed on the surface of T cells and antigen-presenting cells (APCs) and plays an inhibitory role in the proliferation and activation of T cells (4). TAPBPR can be expressed on various cancer cells like leukemia and has the potential to be used in the treatment of autoimmune diseases and transplant rejection, as well as cancer (4).

References:

1. Hermann, C. *et al.* (2015) Tissue antigens **85(3)**:155.
2. Teng, M. *et al.* (2002) European Journal of Immunology **32**:1059.
3. Lin, Y. *et al.* (2021). EMBO Mol Med. **13(5)**:13404.
4. Porter, K.M. *et al.* (2014) Immunology **142**:289.
5. Margulies, D. *et al.* (2020) Current Opinion in Immunology **64**:71.
6. Boyle, L.H. *et al.* (2013) PNAS **110**:3465.
7. Hermann, C. *et al.* (2013) Journal of Immunology **191(11)**:5743.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 **Canada** TEL 855 668 8722 **China** TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449