

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TAP2 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 998524
Purification	Protein A or G purified from ascites
Immunogen	Synthetic peptide containing human TAP2 Accession # Q03519
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.

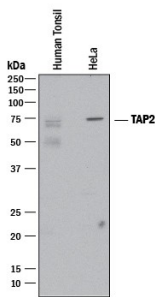
APPLICATIONS

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
Western Blot	2 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

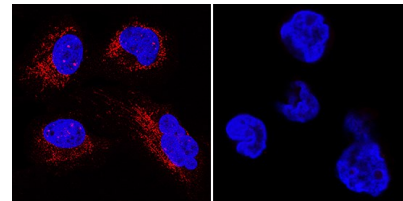
DATA

Western Blot



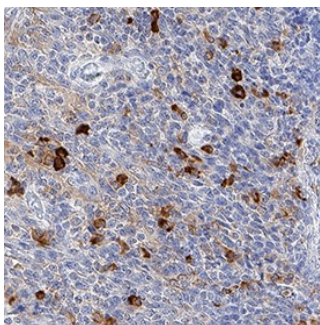
Detection of Human TAP2 by Western Blot. Western blot shows lysates of human tonsil tissue and HeLa human cervical epithelial carcinoma cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human TAP2 Monoclonal Antibody (Catalog # MAB2432) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for TAP2 at approximately 75 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

Immunocytochemistry



TAP2 in U-251 MG and HL-60 Human Cell Line. TAP2 was detected in immersion fixed U-251 MG human glioblastoma cell line (left panel) and HL-60 human acute promyelocytic leukemia cell line (right panel, negative control) using Mouse Anti-Human TAP2 Monoclonal Antibody (Catalog # MAB2432) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



TAP2 in Human Tonsil. TAP2 was detected in immersion fixed paraffin-embedded sections of human tonsil using Mouse Anti-Human TAP2 Monoclonal Antibody (Catalog # MAB2432) at 8 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in lymphocytes. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

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. <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.• 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

TAP2 transports antigens from the cytoplasm to the endoplasmic reticulum, where they can bind to MHC class 1 molecules. It does this translocation by selecting peptides based on both their length and their sequence. The peptide selection occurs during the first step of the translocation process. Transmembrane segments of TAP form a pore in the membrane and the peptide binding site is formed by the cytosolic component of the pore. Inherited deficiency in the TAP transporter can lead to recurrent respiratory bacterial infections due to HLA class I deficiency (BLS1).

References:

1. Nijenhuis M., Hämmerling Journal of immunology; 1996 Dec 15;157(12):5467-5477
2. de la Salle H, Hanau D, Fricker D, Urlacher A, Kelly A, Salamero J, Powis SH, Donato L, Bausinger H, Laforet M, (1994), Science, Jul 8; 265(5169):237-241.