

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human DTX1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, 100% cross-reactivity with recombinant human DTX4 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 730612
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	E. coli-derived recombinant human DTX1/DTX4 Met1-Phe147 Accession # Q86Y01
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 as a 0.2 µm filtered solution in PBS.

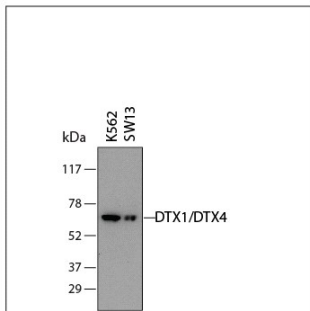
APPLICATIONS

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
Intracellular Staining by Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

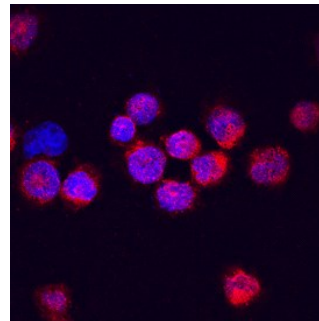
DATA

Western Blot



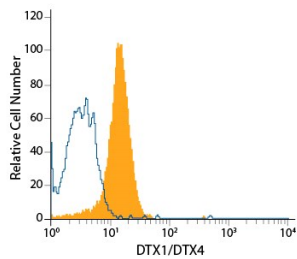
Detection of Human DTX1/DTX4 by Western Blot. Western blot shows lysates of K562 human chronic myelogenous leukemia cell line and SW13 human adrenal cortex adenocarcinoma cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human DTX1/DTX4 Monoclonal Antibody (Catalog # MAB7157) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for DTX1/DTX4 at approximately 67 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



DTX1/DTX4 in K562 Human Cell Line. DTX1/DTX4 was detected in immersion fixed K562 human chronic myelogenous leukemia cell line using Mouse Anti-Human DTX1/DTX4 Monoclonal Antibody (Catalog # MAB7157) at 10 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 Non-adherent Cells](#).

Intracellular Staining by Flow Cytometry



Detection of DTX1/DTX4 in K562 Human Cell Line by Flow Cytometry. K562 human chronic myelogenous leukemia cell line was stained with Mouse Anti-Human DTX1/DTX4 Monoclonal Antibody (Catalog # MAB7157, filled histogram) or isotype control antibody (Catalog # MAB0041, open histogram), followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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

Deltex-1 (DTX1) is an approximately 75 kDa cytoplasmic and nuclear ubiquitin ligase that interacts with the Notch-1 intracellular domain and regulates Notch-induced gene transcription. It contains two WWE domains (aa 14-94 and aa 95-171) and one RING-type zinc finger (aa 411-472). Within aa 1-147, human Deltex-1 shares 97% aa sequence identity with mouse and rat Deltex-1.