

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human DOT1L in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) PCDH-8, rhNME-3, or rhWISP-3 is observed.
Source	Monoclonal Mouse IgG _{2A} Clone # 653613
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human DOT1L Gly2-Lys416 Accession # Q8TEK3
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.

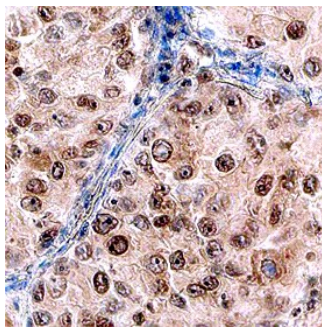
APPLICATIONS

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
Immunohistochemistry	8-25 µg/mL	See Below
Immunoprecipitation	25 µg/mL	Cell lysates spiked with recombinant human DOT1L, see our available Western blot detection antibodies

DATA

Immunohistochemistry



DOT1L in Human Lung. DOT1L was detected in immersion fixed paraffin-embedded sections of human lung using Human DOT1L Monoclonal Antibody (Catalog # MAB6546) at 15 µg/mL overnight at 4 °C. 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 the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

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

DOT1L (mammalian counterpart of yeast Dot1) is a 1537 amino acid (aa), 165 kDa (predicted) nuclear non-SET domain histone H3K79 methyltransferase. It is involved in developmental gene transcription and maintenance of chromatin structure, and may promote mixed lineage leukemia. Within the sequence used as an immunogen, human DOT1L shares 97% and 94% aa identity with mouse and rat DOT1L, respectively. Two human isoforms affect this region: a 1467 aa form has an alternate start site at aa 71, while a 1513 aa form lacks aa 89-112. A third isoform of 1739 aa has a 202 aa C-terminal extension.