



## TdT Antibody

E8M0807-13

**Catalog Number:** E8M0807-13**Amount:** 100ul,0.43mg/ml

**Description:** Terminal deoxynucleotidyltransferase (TdT) is a DNA polymerase expressed in immature lymphocytes of the thymus and bone marrow, as well as certain leukemic cells. The nuclear enzyme TdT plays a critical role in generating immune receptor diversity. During rearrangement of Ig and TCR V region genes, TdT catalyzes the addition of N nucleotides without a DNA template to V-D and D-J junctions in both Ig and TCR as well as the V-J junctions in the TCR (1-3). During the fetal and newborn period, TdT activity is absent, resulting in an N region-deficient Ag receptor repertoire significantly lacking in the diversity observed in the junctional regions of Igs and TCRs of adult animals

**Reactivity:** Human**Positive control:** Jurkat**Cellular Localization :** Mitochondrion**SwissProt:** P04053**Project ID:** M080707**Molecular Wt:** 58kDa

**Form of Antibody:** Mouse monoclonal IgG2b in 1\*TBS (pH7.4), 0.5%BSA, 25%Glycerol. Preservative: 0.05% Sodium Azide.

**Storage/Stability:** Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

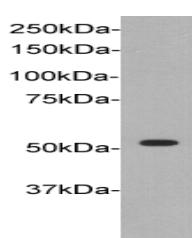
**Specificity/Sensitivity:** This antibody is produced by immunizing mouse with a synthetic peptide (KLH-coupled) corresponding to near C-terminal residues of TdT.

**Applications:** WB: 1:1,000

**References:** 1. Yamashita N., Shimazaki N., Ibe S., Kaneko R., Tanabe A., Toyomoto T., Fujita K., Hasegawa T., Toji S., Tamai K., Yamamoto H., Koiwai O.; "Terminal deoxynucleotidyltransferase directly interacts with a novel nuclear protein that is homologous to p65."; Genes Cells 6:641-652(2001).

2. Yang B., Gathy K.N., Coleman M.S.; "Mutational analysis of residues in the nucleotide binding domain of human terminal deoxynucleotidyl transferase."; J. Biol. Chem. 269:11859-11868(1994).

3. Peterson R.C., Cheung L.C., Mattaliano R.J., Chang L.M.S., Bollum F.J.; "Molecular cloning of human terminal deoxynucleotidyltransferase."; Proc. Natl. Acad. Sci. U.S.A. 81:4363-4367(1984).



**Fig:** Western blot analysis on jurkat lysates using anti-TdT monoclonal antibody.

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