DOT1L1 (E-2): sc-376036

[BACKGROUND]
DOT1L1, also known as DOT1L (DOT1-like, histone H3 methyltransferase), DOT1 or KMT4, is a 1,739 amino acid homolog of the yeast DOT1 (disruptor of telomeric silencing-1) protein. Localized to the nucleus and highly expressed in testis, lung and kidney, DOT1L1 is a histone methyltransferase that transfers methyl groups from S-adenosyl-L-methionine to lysine residues on various substrates, such as nucleosomes or histones. While most histone methyltransferases contain a SET domain through which they confer their enzymatic activity, DOT1L1 does not contain this characteristic domain and is, therefore, thought to function through a different mechanism. DOT1L1 can bind with several MLL-fusion partners found in acute leukemia and, through this binding, can promote oncogenesis. Two isoforms of DOT1L1 are expressed due to alternative splicing events.

[REFERENCES]

[CHROMOSOMAL LOCATION]
Genetic locus: DOT1L (human) mapping to 19p13.3; Dot1l (mouse) mapping to 10 C1.

[SOURCE]
DOT1L1 (E-2) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of DOT1L1 of human origin.

[PRODUCT]
Each vial contains 200 µg IgGκ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-376036 X, 200 µg/0.1 ml.

[STORAGE]
Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

[APPLICATIONS]
DOT1L1 (E-2) is recommended for detection of DOT1L1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for DOT1L1 siRNA (h): sc-77174, DOT1L1 siRNA (m): sc-77175, DOT1L1 shRNA Plasmid (h): sc-77174-SH, DOT1L1 shRNA Plasmid (m): sc-77175-SH, DOT1L1 shRNA (h) Lentiviral Particles: sc-77174-V and DOT1L1 shRNA (m) Lentiviral Particles: sc-77175-V.

DOT1L1 (E-2) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of DOT1L1: 185 kDa.
Positive Controls: DOT1L1 (m): 293T Lysate: sc-178530 or AMJ2-C8 whole cell lysate: sc-364366.

[RECOMMENDED SUPPORT REAGENTS]
To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-24941 or UltraCruz® Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-358850.

[DATA]

[SELECT PRODUCT CITATIONS]

[RESEARCH USE]
For research use only, not for use in diagnostic procedures.