Datasheet for ABIN2669718

DOT1L Protein (AA 1-416) (GST tag)

2 Images

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Overview

Quantity:	50 µg
Target:	DOT1L
Protein Characteristics:	AA 1-416
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This DOT1L protein is labelled with GST tag.
Application:	Enzyme Activity Assay (EAA), Screening Assay (ScA)

Product Details

Characteristics:	Recombinant DOT1L (1-416), an active truncation that includes amino acids 1-416 (accession number NP_115871.1) ,was expressed in E. coli cells and contains an N-terminal GST tag with an observed molecular weight of 72 kDa.

Target Details

Target:	DOT1L
Alternative Name:	DOT1L (DOT1L Products)
Background:	DOT1L (Disruptor of Telomeric silencing 1-like, also known as KMT4) is the mammalian homologue of the yeast Dot1 protein and the Drosophila Grappa protein. DOTL1 is the enzyme responsible for lysine 79 methylation of histone H3. DOT1L can promote an oncogenic pattern

Target Details

	of gene expression through binding with several MLL fusion partners found in acute leukemia, thus leading to aberrant methylation of lysine 79 at MLL target genes. In contrast to most other histone lysine methyltransferases, DOT1L does not contain a SET domain. Biochemical studies suggest that recombinant DOT1L is active on recombinant nucleosomes.
Molecular Weight:	72 kDa

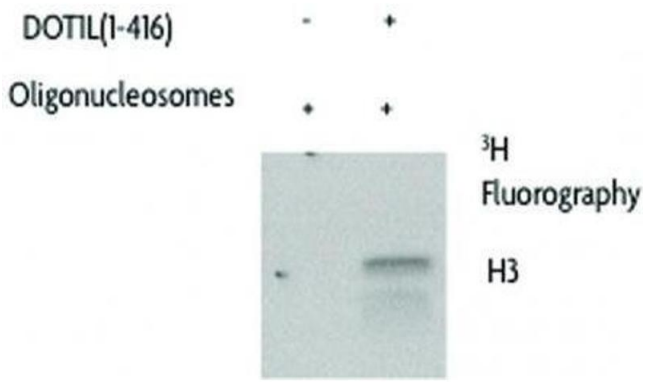
Application Details

Application Notes:	Recombinant DOT1L (1-416), active protein is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. Specific Activity: H3K79 methyltransferase HMT Assay Conditions: 50 mM TrisCl, pH 8.6, 0.02 % Triton X-100, 2 mM MgCl2, 1 mM TCEP, 100 µ M SAM, 30 ng/µl Recombinant Nucleosomes, 30 ng/µl DOT1L (1-416 aa) at 2 hours at room temperature. Activity was detected by fluorography.
Restrictions:	For Research Use only

Handling

Handling Advice:	Avoid repeated freeze/thaw cycles and keep on ice when not in storage.
Storage:	-80 °C
Storage Comment:	Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation.

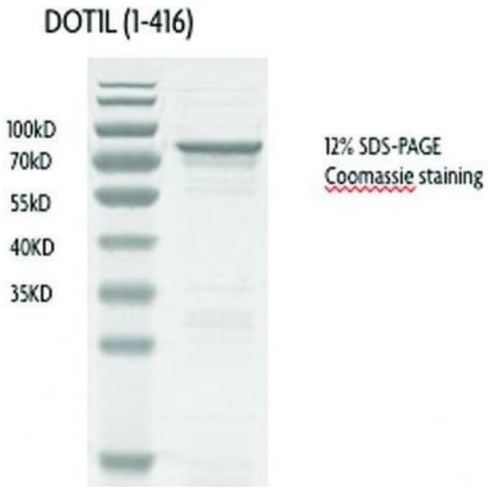
Images



Western Blotting

Image 1. DOT1L (1-416), active activity assay using Recombinant Nucleosomes as substrates. Recombinant Nucleosomes were used as substrates in an assay measuring the methyltransferase activity of DOT1L (1-416), active. Activity was detected by fluorography.

Images



Western Blotting

Image 2. Recombinant DOT1L (1-416), active protein gel. Recombinant DOT1L (1-416), active run on an SDS-PAGE gel and stained with Coomassie blue.