Datasheet for ABIN7317542

# DOT1L Protein

Go to Product page

## Overview

| | |
|---|---|
| Quantity: | 50 µg |
| Target: | DOT1L |
| Origin: | Human |
| Source: | Escherichia coli (E. coli) |
| Protein Type: | Recombinant |

## Product Details

| | |
|---|---|
| Purpose: | Recombinant Human DOT1L/KMT4 Protein |
| Sequence: | Gly 2-Lys 416 |
| Characteristics: | A DNA sequence encoding the human DOT1L (NP_115871.1) N-terminal segment (Gly 2-Lys 416) was expressed and purified, with two additional amino acids (Gly & Pro) at the N-terminus. |
| Purity: | > 90 % as determined by reducing SDS-PAGE. |

## Target Details

| | |
|---|---|
| Target: | DOT1L |
| Alternative Name: | DOT1L/KMT4 (DOT1L Products) |
| Background: | Background: Histone-lysine N-methyltransferase, H3 lysine-79 specific, also known as Histone H3-K79 methyltransferase, DOT1-like protein, Lysine N-methyltransferase 4 and DOT1L, is a nucleus protein which belongs to the DOT1 family. In contrast to other lysine histone methyltransferase, DOT1L does not contain a SET domain, suggesting the existence of another mechanism for methylation of lysine residues of histones. DOT1L is an histone |

## Target Details

| | |
|---|---|
| | methyltransferase. It methylates 'Lys-79' of histone H3. Nucleosomes are preferred as substrate compared to free histones. DOT1L binds to DNA. Methylation of lysine 79 on histone H3 (H3K79) is mediated by DOT1L. It is involved in the regulation of telomeric silencing, development, cell cycle checkpoint and transcription. Mass spectrometry of the DOT1L-containing complex revealed that AF9, ENL and NPM1 were shown to be major DOT1L-interacting proteins. DOT1L might control AF9- and ENL-mediated transcription, regulate RNA processing, and function as a histone chaperone in a NPM1-dependent manner.<br>Synonym: DOT1;KMT4 |
| Molecular Weight: | 47.6 kDa |
| NCBI Accession: | NP_115871 |

## Application Details

| | |
|---|---|
| Restrictions: | For Research Use only |

## Handling

| | |
|---|---|
| Format: | Lyophilized |
| Reconstitution: | Please refer to the printed manual for detailed information. |
| Buffer: | Lyophilized from sterile 20 mM HEPES, 150 mM NaCl, 1 mM EDTA, 15 % glycerol, pH 7.5 |
| Storage: | 4 °C,-20 °C,-80 °C |
| Storage Comment: | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |