

DOT1L (2- 416 aa), Human recombinant protein
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Catalog # PBV11242r**Specification**

DOT1L (2- 416 aa), Human recombinant protein - Product info

Primary Accession [Q8TEK3](#)
Calculated MW **74.1 kDa (2- 416 aa + NT GST Tag) KDa**

DOT1L (2- 416 aa), Human recombinant protein - Additional Info

Gene ID **84444**
Gene Symbol **DOT1L**
Other Names
Dot1-like; Disruptor of Telomeric Signaling 1-Like

Gene Source **Human**
Source **E. coli**
Assay&Purity **SDS-PAGE; ≥95%**
Assay2&Purity2 **HPLC;**
Recombinant **Yes**
Target/Specificity
DOT1L

Format
Liquid

Storage
-80°C; 20 mM Tris, pH 8.0, containing 200 mM sodium chloride, 1 mM EDTA and 1 mM DTT.

DOT1L (2- 416 aa), Human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

DOT1L (2- 416 aa), Human recombinant protein - Images**DOT1L (2- 416 aa), Human recombinant protein - Background**

Dot1L is a non-SET domain containing methyltransferase. It is the only enzyme known to methylate histone 3 at lysine 79, where it catalyzes mono-, di-, and trimethylation. Proper Dot1L function is

necessary for transcriptional activation of many genes, DNA damage repair, and cell cycle regulation. Dot1L plays an essential role in MLL-rearranged leukemias and is being investigated as a drug-target for these leukemias. Experiments using siRNA or shRNA have shown that knockdown of Dot1L leads to loss of proliferation in lung cancer cells or faster reprogramming and increased yield of induced pluripotent stem cells, respectively. This protein product contains the methyltransferase domain of Dot1L.

DOT1L (2- 416 aa), Human recombinant protein - References

Feng Q.,et al.Curr. Biol. 12:1052-1058(2002).
Grimwood J.,et al.Nature 428:529-535(2004).
Nagase T.,et al.DNA Res. 8:85-95(2001).
Jikuya H.,et al.DNA Res. 10:49-57(2003).
Okada Y.,et al.Cell 121:167-178(2005).