

# DOT1 Catalytic Domain, human

**Catalog No.** 15-1001  
**Lot No.** 13140001  
**Pack Size** 50 µg



**Type** HMT  
**Mol. Wgt.** 85 kDa  
**Expressed In** *E. coli*  
**Epitope Tag** GST

## Product Description:

Recombinant human DOT1 protein, catalytic domain (DOT1L, KMT4, accession Q8TEK3, amino acids 1-472), containing an N-terminal GST tag, expressed in *E. coli*. DOT1 is a histone methyltransferase, catalyzing the methylation of histone H3 at lysine 79 on nucleosomal substrates.

## Formulation:

Recombinant GST-DOT1L (1 µg/µl) 100 mM Tris pH 8.0, 5 mM glutathione and 25% glycerol.

## Storage and Stability:

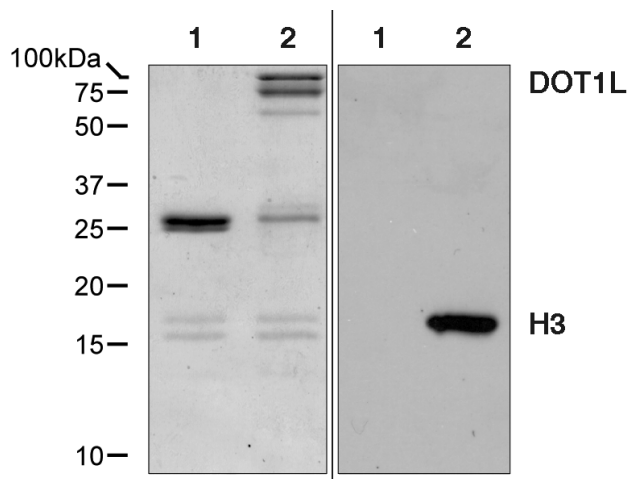
Stable for six months at -80°C from date of receipt. For best results, aliquot and avoid multiple freeze/thaws.

## Application Notes:

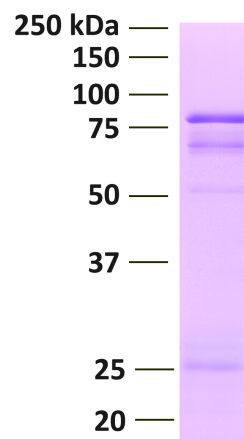
Recombinant DOT1L Catalytic Domain, human is useful for histone H3 methylation experiments, enzyme kinetics and inhibitor screening. Use of 3-5 µg DOT1 per reaction with HeLa or recombinant nucleosomes as a substrate is recommended.

## References:

Kuo AJ et al (2011). *Mol Cell* 44: 609-620.



**Enzyme Activity Data:** Recombinant DOT1L Catalytic Domain, human (5 µg) was used in a methylation assay with 1 µg recombinant *Xenopus* nucleosomes and radioactive SAM and the reaction was run on a PAGE gel. **Lane 1:** GST only vector. **Lane 2:** GST-DOT1L vector. **Left Panel:** Coomassie stained gel. **Right panel:** Autoradiograph.



**Protein Gel Data:** Recombinant DOT1L Catalytic Domain, human (1 µg) run on a PAGE gel and stained with Coomassie blue. Migration and molecular weight of protein standards is indicated.

This product is for *in vitro* research use only and is not intended for use in humans or animals.