Recombinant DOT1L protein (His tag)

Catalog Number	543250
Synonyms	DOT1-like protein; Histone H3-K79 methyltransferase; H3-K79-HMTase; Lysine N-methyltransferase 4
Species	Human
Expression System	E. coli
Accession	Q8TEK3
Molecular Weight	Predictes a molecular mass of 40.90 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 44 kDa band.

Product Information

Amino Acid Sequence	MGEKLELRLK SPVGAEPAVY PWPLPVYDKH HDAAHEIIET IRWVCEEIPD LKLAMENYVL IDYDTKSFES MQRLCDKYNR AIDSIHQLWK GTTQPMKLNT RPSTGLLRHI LQQVYNHSVT DPEKLNNYEP FSPEVYGETS FDLVAQMIDE IKMTDDDLFV DLGSGVGQVV LQVAAATNCK HHYGVEKADI PAKYAETMDR EFRKWMKWYG KKHAEYTLER GDFLSEEWRE RIANTSVIFV NNFAFGPEVD HQLKERFANM KEGGRIVSSK PFAPLNFRIN SRNLSDIGTI MRVVELSPLK GSVSWTGKPV SYYLHTIDRT ILENYFSSLK NPKLREEQEA ARRRLEHHHH HH
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-344 aa (Q8TEK3) were fused with C-terminal 6His tag.

Storage & Handling

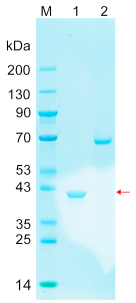
Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human DOT1L (1-344) is a high-purity protein fragment encompassing the DOT1 domain of Histone-lysine N-methyltransferase DOT1L. This product is engineered for studying H3 lysine-79 methylation and chromatin regulation, offering researchers a targeted tool for domain-specific functional assays. Histone-lysine N-methyltransferase DOT1L (UniProt Q8TEK3) is a human enzyme that specifically methylates 'Lys-79' of histone H3, preferentially acting on nucleosomes over free histones. It also demonstrates DNA-binding capability, contributing to its role in chromatin modification and epigenetic regulation. DOT1L localizes to the nucleus, where it functions as a key mediator of histone methylation, influencing gene expression and cellular processes through its histone H3-K79 methyltransferase activity.

Validation

SDS-PAGE



Recombinant DOT1L protein (His tag) SDS-PAGE
M: Marker; Lane 1: DOT1L; Lane 2: BSA