abcam

Product datasheet

Recombinant Human SET7 protein ab51285

2 Images

Description

Product name Recombinant Human SET7 protein

Purity > 95 % SDS-PAGE.

Expression system Escherichia coli

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence MDSDDEMVEE AVEGHLDDDG LPHGFCTVTY

SSTDRFEGNF VHGEKNGRGK FFFFDGSTLE GYYVDDALQG QGVYTYEDGG VLQGTYVDGE LNGPAQEYDT DGRLIFKGQY KDNIRHGVCW

IYYPDGGSLV GEVNEDGEMT GEKIAYVYPD ERTALYGKFI

DGEMIEGKLA TLMSTEEGRP HFELMPGNSV

YHFDKSTSSC ISTNALLPDP YESERVYVAE SLISSAGEGL

FSKVAVGPNT VMSFYNGVRI THQEVDSRDW ALNGNTLSLD EETVIDVPEP YNHVSKYCAS

LGHKANHSFT PNCIYDMFVH PRFGPIKCIR TLRAVEADEE LTVAYGYDHS PPGKSGPEAP EWYQVELKAF QATQQK

Predicted molecular weight 41 kDa

Specifications

Our Abpromise guarantee covers the use of ab51285 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

Western blot

Form Liquid

Preparation and Storage

Stability and Storage Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

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Constituents: 0.077% DTT, 0.79% Tris HCl, 20% Glycerol (glycerin, glycerine), 1.16% Sodium

General Info

Function

Histone methyltransferase that specifically monomethylates 'Lys-4' of histone H3. H3 'Lys-4' methylation represents a specific tag for epigenetic transcriptional activation. Plays a central role in the transcriptional activation of genes such as collagenase or insulin. Recruited by IPF1/PDX-1 to the insulin promoter, leading to activate transcription. Has also methyltransferase activity toward non-histone proteins such as p53/TP53, TAF10, and possibly TAF7 by recognizing and binding the [KR]-[STA]-K in substrate proteins. Monomethylates 'Lys-189' of TAF10, leading to increase the affinity of TAF10 for RNA polymerase II. Monomethylates 'Lys-372' of p53/TP53, stabilizing p53/TP53 and increasing p53/TP53-mediated transcriptional activation. Also able to demethylated 'Lys-372' of p53/TP53 in vitro.

Tissue specificity

Widely expressed. Expressed in pancreatic islets.

Sequence similarities

Belongs to the histone-lysine methyltransferase family. SET7 subfamily.

Contains 3 MORN repeats. Contains 1 SET domain.

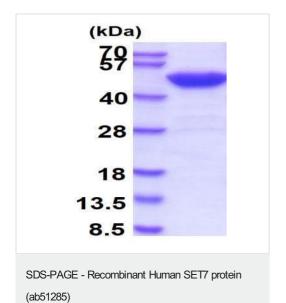
Domain

The SET domain is necessary but not sufficient for histone methyltransferase activity.

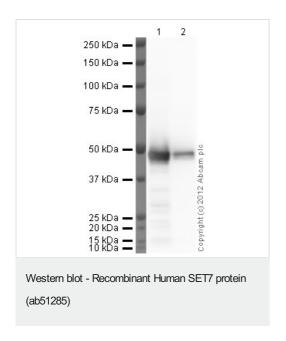
Cellular localization

Nucleus. Chromosome.

Images



ab51285 run on a 10% SDS-PAGE gel with molecular weight markers.



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