# abcam

## Product datasheet

# Recombinant human SET7 protein ab167960

### 2 Images

**Description** 

Product name Recombinant human SET7 protein

Biological activity

The specific activity of ab167960 was determined to be 40 nmol/min/mg as per activity assay

protocol.

**Purity** > 95 % SDS-PAGE.

Assessed by densitometry. Affinity purified.

Expression system Baculovirus infected Sf9 cells

Accession Q8WTS6

Protein length Full length protein

Animal free No.

Nature Recombinant

**Species** Human

Sequence MDSDDEMVEEAVEGHLDDDGLPHGFCTVTYSSTDRFEG

NFVHGEKNGRGK

FFFFDGSTLEGYYVDDALQGQGVYTYEDGGVLQGTYVDG

ELNGPAQEYDT

DGRLIFKGQYKDNIRHGVCWIYYPDGGSLVGEVNEDGEMT

**GEKIAYVYPD** 

ERTALYGKFIDGEMIEGKLATLMSTEEGRPHFELMPGNSV

YHFDKSTSSC

ISTNALLPDPYESERVYVAESLISSAGEGLFSKVAVGPNTV

**MSFYNGVRI** 

THQEVDSRDWALNGNTLSLDEETVIDVPEPYNHVSKYCA

**SLGHKANHSFT** 

PNCIYDMFVHPRFGPIKCIRTLRAVEADEELTVAYGYDHSP

PGKSGPEAP EWYQVELKAFQATQQK

Predicted molecular weight 75 kDa including tags

Amino acids 1 to 366

Tags proprietary tag N-Terminus

**Specifications** 

Our **Abpromise guarantee** covers the use of **ab167960** in the following tested applications.

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

Applications SDS-PAGE

Western blot

**Functional Studies** 

Form Liquid

#### **Preparation and Storage**

Stability and Storage Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 7.50

Constituents: 0.31% Glutathione, 0.002% PMSF, 0.004% DTT, 0.79% Tris HCI, 0.003% EDTA,

25% Glycerol (glycerin, glycerine), 0.88% Sodium chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

#### **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.

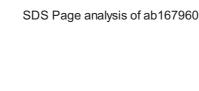
**Sequence similarities**Belongs to the histone-lysine methyltransferase family. SET7 subfamily.

Contains 3 MORN repeats.
Contains 1 SET domain.

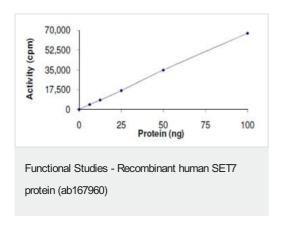
**Domain** The SET domain is necessary but not sufficient for histone methyltransferase activity.

**Cellular localization** Nucleus. Chromosome.

#### **Images**







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