

Product datasheet

Recombinant human HDAC9 protein ab80350

2 Images

Description

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<b>Product name</b>	Recombinant human HDAC9 protein
<b>Biological activity</b>	Specific Activity: >1000 U/ug. One U =1pmol/min. Assay condition: 25 mM Tris/Cl, pH8.0, 137 mM NaCl, 2.7 mM KCl, 1 mM MgCl <sub>2</sub> , and 0.1 mg/ml BSA, 20 uM BPS HDAC substrate, and 0.2 ng/ul HDAC9. Incubation condition: 30 min at 37°C.
<b>Purity</b>	> 95 % SDS-PAGE.
<b>Expression system</b>	Baculovirus infected Sf9 cells
<b>Protein length</b>	Protein fragment
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Amino acids</b>	604 to 1066

Specifications

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Our [Abpromise guarantee](#) covers the use of **ab80350** in the following tested applications.

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

<b>Applications</b>	Functional Studies SDS-PAGE
<b>Form</b>	Liquid

Preparation and Storage

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<b>Stability and Storage</b>	Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle. pH: 8.00 Constituents: 0.395% Tris HCl, 0.05% Tween, 50% Glycerol, 0.8004% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.
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General Info

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<b>Function</b>	Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. Represses MEF2-dependent transcription. Isoform 3 lacks active site residues and therefore is catalytically inactive. Represses MEF2-dependent transcription by recruiting HDAC1 and/or HDAC3. Seems to inhibit skeletal myogenesis and to be involved in heart development. Protects neurons from apoptosis, both by inhibiting JUN phosphorylation by MAPK10 and by repressing JUN transcription via HDAC1 recruitment to JUN promoter.
<b>Tissue specificity</b>	Broadly expressed, with highest levels in brain, heart, muscle and testis. Isoform 3 is present in human bladder carcinoma cells (at protein level).
<b>Involvement in disease</b>	Note=A chromosomal aberration involving HDAC9 is found in a family with Peters anomaly. Translocation t(1;7)(q41;p21) with TGFB2 resulting in lack of HDAC9 protein.
<b>Sequence similarities</b>	Belongs to the histone deacetylase family. HD type 2 subfamily.
<b>Post-translational modifications</b>	Phosphorylated on Ser-220 and Ser-450; which promotes 14-3-3-binding, impairs interaction with MEF2, and antagonizes antimyogenic activity. Phosphorylated on Ser-240; which impairs nuclear accumulation (By similarity). Isoform 7 is phosphorylated on Tyr-1010. Phosphorylated by the PKC kinases PKN1 and PKN2, impairing nuclear import. Sumoylated.
<b>Cellular localization</b>	Nucleus.

## Images

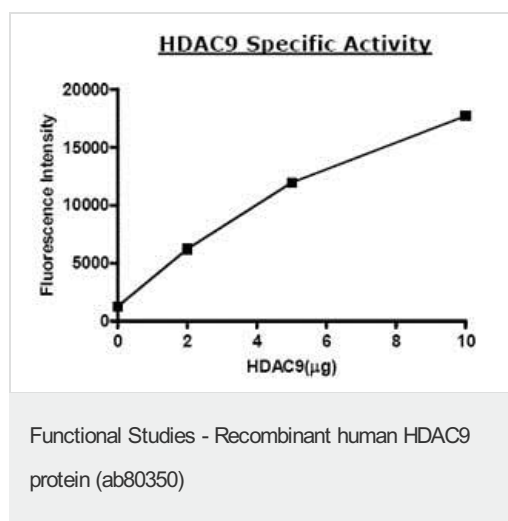
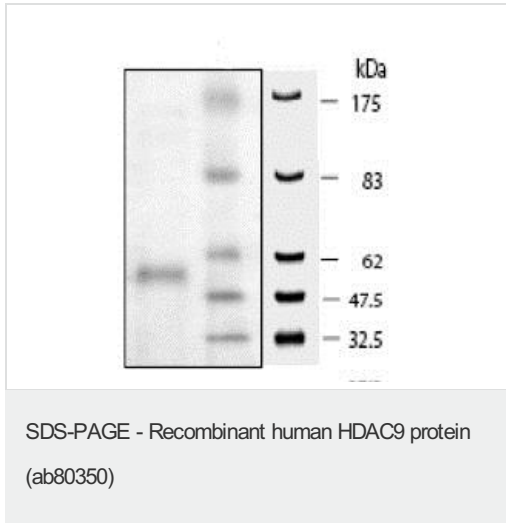


Image showing specific activity of ab80350.



10% SDS-PAGE showing ab80350 at approximately 50.7kDa (3µg).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

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- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
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If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

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