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# **Product Information**

HDAC9, active, GST-tagged, human recombinant, expressed in Sf9 cells

Catalog Number **SRP5268** Storage Temperature –70 °C

Synonyms: DKFZp779K1053, HD7, HDAC, HDAC7, HDAC7B, HDAC9B, HDAC9FL, HDRP, KIAA0744, MITR

## **Product Description**

HDAC9 or MIRT belongs to the histone deacetylase /acuc/apha family and is a component of the histone deacetylase complex. *HDAC9* gene is orthologous to the *Xenopus* and mouse MITR genes (MEF2-interacting transcription repressor). HDAC9 represses MEF2 activity through recruitment of multicomponent corepressor complexes that include CtBP and HDACs. HDAC9 is a calcium-sensitive transcriptional repressor of MEF2. Binding of calmodulin to HDAC9 leads to its dissociation from MEF2, relieving MEF2 from the transcriptional repression. HDAC9 is a signal-responsive transcriptional repressor in mouse skeletal muscle that is downregulated upon denervation.<sup>2</sup>

Recombinant human HDAC9 (548-end) was expressed by baculovirus in *Sf*9 insect cells using an N-terminal GST-tag. The gene accession number is NM\_058176. It is supplied in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~77 kDa

## **Precautions and Disclaimer**

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

### Storage/Stability

The product ships on dry ice and storage at  $-70~^{\circ}$ C is recommended. After opening, aliquot into smaller quantities and store at  $-70~^{\circ}$ C. Avoid repeated handling and multiple freeze/thaw cycles.

Figure 1.

SDS-PAGE Gel of Typical Lot:

≥70% (SDS-PAGE, densitometry)

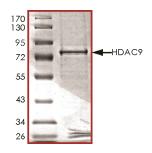
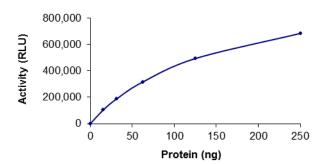


Figure 2.
Specific Activity of Typical Lot: 199–299 RLU/min/ng



Histone deacetylase (HDAC) activity was determined with a luminescent assay procedure.

#### References

- Youn, H-D. et al., Calcium regulates transcriptional repression of myocyte enhancer factor 2 by histone deacetylase 4. J. Biol. Chem., 275, 22563-22567 (2000).
- 2. Mejat, A. et al., Histone deacetylase 9 couples neuronal activity to muscle chromatin acetylation and gene expression. Nature Neurosci., **8**, 313-321 (2005).

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