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# Product Information

**HDAC1, active, GST-tagged, human recombinant, expressed in *Sf*9 cells**

Catalog Number **SRP5265**
Storage Temperature –70 °C

Synonyms: HD1, RPD3, GON-10, RPD3L1, DKFZp686H12203

## Product Description

HDAC1 or Histone deacetylase 1 belongs to the histone deacetylase/acuc/apha family and is a component of the histone deacetylase complex, which plays a key role in the regulation of eukaryotic gene expression.[1] HDAC1 interacts with retinoblastoma tumor-suppressor protein and this complex is a key element in the control of cell proliferation and differentiation. Together with metastasis-associated protein-2, HDAC1 deacetylates p53 and modulates its effect on cell growth and apoptosis. HDAC1 is an essential element of the co-activation system for IFN-induced gene regulation and antiviral responses.[2]

Full-length recombinant human HDAC1 was expressed by baculovirus in *Sf*9 insect cells using a C-terminal GST-tag. The gene accession number is NM_004964. 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: ~88 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 °C is recommended. After opening, aliquot into smaller quantities and store at –70 °C. Avoid repeated handling and multiple freeze/thaw cycles.

**Figure 1.**
SDS-PAGE Gel of Typical Lot:
≥70% (SDS-PAGE, densitometry)

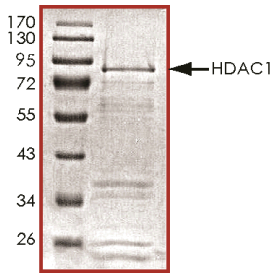
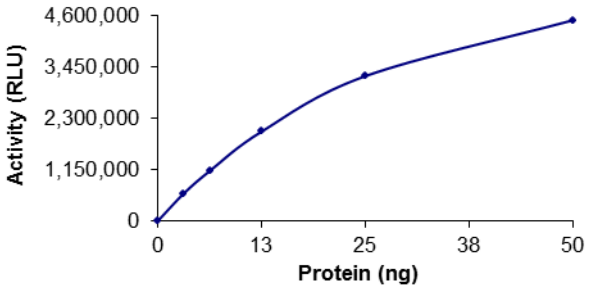



**Figure 2.**
Specific Activity of Typical Lot:
7,565–11,765 RLU/min/ng




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

## References

1. Bauer, W.R. et.al., Nucleosome structural changes due to acetylation. J. Molec. Biol., **236**, 685-690 (1994).
2. Nusinzon, I. et.al., Interferon-stimulated transcription and innate antiviral immunity require deacetylase activity and histone deacetylase 1. Proc. Nat. Acad. Sci., **100**, 14742-14747 (2003).

RC,MAM 12/12-1