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Product Information

HDAC2, active, GST-tagged, human recombinant, expressed in *Sf*9 cells

Catalog Number **SRP5266**
Storage Temperature –70 °C

Synonyms: RPD3, YAF1

Product Description

HDAC2 or Histone deacetylase 2 belongs to the histone deacetylase family that acts via the formation of large multiprotein complexes, and is responsible for the deacetylation of lysine residues at the N-terminal regions of core histones (H2A, H2B, H3, and H4). HDAC2 forms transcriptional repressor complexes by associating with many different proteins and plays an important role in transcriptional regulation, cell cycle progression, and developmental events. HDAC2 functions in modulating synaptic plasticity and long-lasting changes of neural circuits, which in turn negatively regulates learning and memory.[1] HDAC1 and HDAC2 are functionally redundant in cardiac growth and development, and they maintain cardiomyocyte identity and function.[2]

Full-length recombinant human HDAC2 was expressed by baculovirus in *Sf*9 insect cells using a C-terminal GST-tag. The gene accession number is NM_001527. 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: ~92 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)

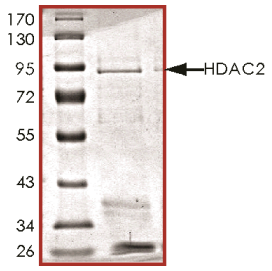

Figure 2.
Specific Activity of Typical Lot:
3,553–5,520 RLU/min/ng

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

References

1. Guan, J.S. et al., HDAC2 negatively regulates memory formation and synaptic plasticity. Nature, **459**, 55-60 (2009).
2. Montgomery, R.L. et al., Histone deacetylases 1 and 2 redundantly regulate cardiac morphogenesis, growth, and contractility. Genes Dev., **21**, 1790-1802 (2007).

RC,MAM 12/12-1