

# PRODUCT INFORMATION



## HDAC6 (human, recombinant)

Item No. 10009465

### Overview and Properties

**Synonym:** Histone Deacetylase 6  
**Source:** 50 µg of full-length recombinant N-terminal GST-tagged protein expressed in Sf9 cells  
**Amino Acids:** 2-1215 (full length)  
**Uniprot No.:** Q9UBN7  
**Molecular Weight:** 159 kDa  
**Storage:** -80°C (as supplied)  
**Stability:** ≥6 months  
**Purity:** *batch specific*  
**Supplied in:** 40 mM Tris-HCl, pH 8.0, with 110 mM sodium chloride, 2.2 mM potassium chloride, 0.04% Tween 20, 3 mM DTT, and 20% glycerol

#### Protein

**Concentration:** *batch specific* mg/ml  
**Specific Activity:** *batch specific* U/mg  
**Unit Definition:** One unit is the amount of enzyme required to release 1 pmol of acetate per minute at 37°C in 25 mM Tris/HCl, pH 8.0, 137 mM NaCl, 2.7 mM KCl, 1 mM MgCl<sub>2</sub>, 0.1 mg/ml BSA, and 20 µM fluorogenic HDAC substrate 3

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Description

HDAC6 is a Class II HDAC that can shuttle between the nucleus and cytoplasm, suggesting potential extranuclear functions by regulating the acetylation status of non-histone substrates. By modifying chromatin structure and other non-histone proteins, HDACs play important roles in controlling complex biological events, including cell development, differentiation, programmed cell death, angiogenesis, and inflammation.<sup>1,2</sup> Considering these major roles, it is conceivable that dysregulation of HDACs and subsequent imbalance of acetylation and deacetylation may be involved in the pathogenesis of various diseases, including cancer and inflammatory diseases.<sup>1</sup>

### References

1. Lin, H.Y., Chen, C.S., Lin, S.P., *et al.* Targeting histone deacetylase in cancer therapy. *Med. Res. Rev.* **26(4)**, 397-413 (2006).
2. Huang, L. Targeting histone deacetylases for the treatment of cancer and inflammatory diseases. *J. Cell. Physiol.* **209(3)**, 611-616 (2006).

WARNING  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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