

PRODUCT INFORMATION



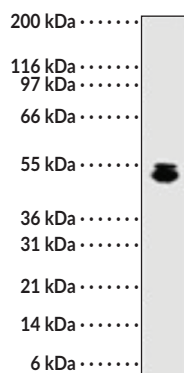
HDAC3 Polyclonal Antibody

Item No. 13493

Overview and Properties

Contents:	This vial contains 100 µg of protein G-affinity purified polyclonal antibody.
Synonyms:	Histone Deacetylase 3, KDAC, RPD3
Immunogen:	Synthetic peptide corresponding to human HDAC3 (2-17)
Cross Reactivity:	(+) HDAC3
Species Reactivity:	(+) Human
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS, with 0.02% sodium azide
Concentration:	1.0 mg/ml
Host:	Rabbit
Isotype:	IgG
Applications:	Chromatin immunoprecipitation (ChIP), Immunoprecipitation (IP), and Western blot (WB); the recommended starting concentration is 2 µg/ml for ChIP, IP, and WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



WB of HeLa cell lysates with HDAC3 Polyclonal Antibody.

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.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Histone deacetylase 3 (HDAC3) is a zinc-dependent metalloenzyme and class I HDAC.^{1,2} It is ubiquitously expressed and localizes primarily to the nucleus but also to the cytoplasm and plasma membrane. HDAC3 forms a complex with nuclear receptor co-repressor (NCOR) and silencing mediator of retinoic thyroid receptors (SMRT) to deacetylate histones and induce transcriptional repression and can be recruited to sites bound by activating transcription factor 2 (ATF2) without NCOR to induce inflammatory gene expression, indicating a role in transcriptional activation.^{2,3} HDAC3 activity is correlated with various diseases, including cancer, metabolic disorders, autoimmune disorders, neurodegenerative and CNS disorders, and cardiovascular disease.⁴ Cayman's HDAC3 Polyclonal Antibody can be used for chromatin immunoprecipitation (ChIP), immunoprecipitation (IP), and Western blot (WB) applications.

References

1. Huang, L. Targeting histone deacetylases for the treatment of cancer and inflammatory diseases. *J. Cell. Physiol.* **209**(3), 611-616 (2006).
2. Sarkar, R., Banerjee, S., Amin, S.A., *et al.* Histone deacetylase 3 (HDAC3) inhibitors as anticancer agents: A review. *Eur. J. Med. Chem.* **192**, 112171 (2020).
3. Nguyen, H.C.B., Adlanmerini, M., Hauck, A.K., *et al.* Dichotomous engagement of HDAC3 activity governs inflammatory responses. *Nature* **584**(7820), 286-290 (2020).
4. Adhikari, N., Jha, T., and Ghosh, B. Dissecting histone deacetylase 3 in multiple disease conditions: Selective inhibition as a promising therapeutic strategy. *J. Med. Chem.* **64**(13), 8827-8869 (2021).

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