

Recombinant Human Histone deacetylase 3(HDAC3)

Catalog No: #AP70386

Package Size: #AP70386-1 20ug #AP70386-2 100ug #AP70386-3 1mg

Description

Product Name	Recombinant Human Histone deacetylase 3(HDAC3)
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:1-428aaSequence Info:Full Length
Other Names	RPD3-2SMAP45
Accession No.	O15379
Calculated MW	64.8 kDa
Tag Info	N-terminal 6xHis-SUMO-tagged
Target Sequence	MAKTVAIFYDPDVGNFHYGAGHPMKPHRLALTHSLVLHYGLYKKMIVFKPYQASQHDMCRFHSEDYIDFLQR VSPTNMQGFTKSLNAFNVGDDCPVFGLFEFCsRYTGASLQGATQLNNKICDIANWAGGLHHAKKFEASGFC YVNDIVIGILELLKYHPRVLYIDIDIHHGDGVQEAFLYLTDRVMTVSFHKYGNFYFFPGTGDMEYVGAESGRYYCL NVPLRDGIDDQSYKHLFQPVINQVVDYFQPTCIVLQCGADSLGCDRLGCFNLSIRGHGECVEYVKSFNIPLLVL GGGGYTVRNVARCWYETSLVVEEAISEELPYSEYFEYFAPDFTLHPDVSTRIENQNSRQYLDQIRQTIFENLK MLNHAPSVQIHDVPADLLTYDRTDEADAEERGPEENYSRPEAPNEFYDGDHDNDKESDVEI
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4), and some other non-histone substrates. Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. Histone deacetylases act via the formation of large multiprotein complexes. Participates in the BCL6 transcriptional repressor activity by deacetylating the H3 'Lys-27' (H3K27) on enhancer elements, antagonizing EP300 acetyltransferase activity and repressing proximal gene expression. Probably participates in the regulation of transcription through its binding to the zinc-finger transcription factor YY1; increases YY1 repression activity. Required to repress transcription of the POU1F1 transcription factor. Acts as a molecular chaperone for shuttling phosphorylated NR2C1 to PML bodies for sumoylation. Contributes, together with XBP1 isoform 1, to the activation of NFE2L2-mediated HMOX1 transcription factor gene expression in a PI3K,mTORC2,Akt-dependent signaling pathway leading to endothelial cell (EC) survival under disturbed flow,oxidative stress.

References

Genomic organization and chromosomal localization of the human histone deacetylase 3 gene.Mahlknecht U., Emiliani S., Najfeld V., Young S., Verdin E.Genomics 56:197-202(1999)Research Topic:Transcription

Note: This product is for in vitro research use only and is not intended for use in humans or animals.