CREATIVE BIOMART®
Assay Kit

HDAC6 Activity Assay Kit (Fluorometric)

Product Information

Cat

Kit-1028

Common Name

HDAC6

Cat.No.

Kit-1028

Description

Histone Deacetylase 6 (HDAC6, EC 3.5.1.98), is a class IIb HDAC enzyme that deacetylates an ε-N-acetyl lysine of histone and non-histone protein substrates. It is a unique member of HDAC family as it contains two deacetylase domains that are proposed to function independent of each other. HDAC6 can shuttle between the nucleus and cytoplasm, suggesting potential extra-nuclear functions by regulating the acetylation status of non-histone substrates. HDAC6 also affects transcription and translation by regulating the heat-shock protein 90 (Hsp90) and stress granules. Elevated HDAC6 activity is associated with cell motility and increases a-tubulin deacetylation, thus influencing cancer cell metastasis. In addition, mutations in HDAC6 gene have been associated with Alzheimers disease. HDAC6-selective inhibitors are considered as promising targets for autoimmune, oncology and inflammatory diseases. HDAC6 Activity Assay Kit utilizes deacetylase activity of HDAC6 towards a synthetic acetylated-peptide substrate resulting in the release of an AFC fluorophore, which can be easily quantified using a conventional microplate reader. This simple and high-throughput adaptable assay kit can be used to detect HDAC6 activity (as low as 3 U) in complex biological samples.

Applications

Rapid, high-throughput screening of drugs and novel ligands.
Development of structure-activity relationship (SAR) models to predict HDAC6 interaction liability of novel compounds.
Measurement of HDAC6 activity in various biological samples.

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CREATIVE BIOMART®
Assay Kit

HDAC6 Activity Assay Kit (Fluorometric)

Storage
-80°C
Shipping
Dry Ice
Size
100 assays
Kit Components
HDAC6 Assay Buffer; HDAC6 Lysis Buffer; Human HDAC6 Positive Control; HDAC6 Substrate; Developer; HDAC6 Inhibitor (Tubacin, 1 mM); AFC Standard (1 mM)
Target Species
Eukaryotes
Detection method Fluorescence(Ex/Em 380/490 nm)
Features & Benefits
Simple, highly sensitive, high-throughput compatible; Rapid screening of HDAC6 inhibitors; Kit includes Tubacin, an HDAC6 inhibitor, and a stable, recombinant human HDAC6

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