

HDAC Assay Kits

easy, sensitive, colorimetric and fluorescent assays for histone deacetylase activity

Active Motif's colorimetric and fluorescent HDAC Assay Kits are simple, 96-well plate-based assays to determine the histone deacetylase (HDAC) activity or to screen potential inhibitor compounds in your cell or nuclear extracts, immunoprecipitates or purified enzymes. The HDAC Assay Kits can be used to determine the rate of histone deacetylase activity of Class I and II HDAC enzymes. Kits include positive control HeLa nuclear extracts, deacetylated HDAC assay standard, HDAC peptide substrate, trichostatin A as a model inhibitor and all the essential buffers for a full 96-well plate assay. Please visit www.activemotif.com for more complete information.

Easy colorimetric and fluorescent readouts for HDAC activity

HDAC Assay Kits utilize a short peptide substrate that contains an acetylated lysine residue that can be deacetylated by Class I, II and IV HDAC enzymes. (Class III & Sirtuin HDACs require addition of the NAD⁺ cofactor to the assay.) Once the substrate is deacetylated, the lysine residue reacts with the Developing Solution and releases either a chromophore (Colorimetric Kit) or a fluorophore (Fluorescent Kit), which is then measured. A deacetylated assay standard is provided to enable calculation of HDAC activity in your test nuclear extracts.

- Works with Class I & II HDAC enzymes
- Easy to adapt to work with Class III or Sirtuin HDACs
- Use nuclear extracts, immunoprecipitates, column fractions or purified proteins
- Calculate enzymatic activity and screen inhibitor compounds

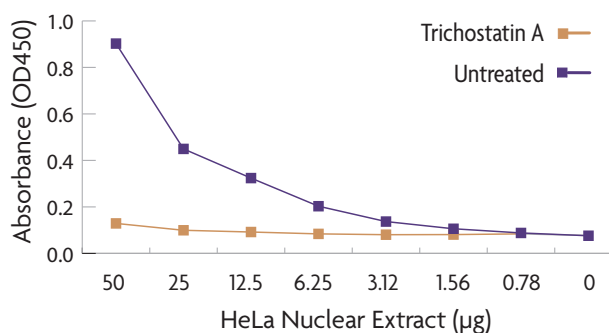


Figure 1: Colorimetric HDAC Assay Results.

HeLa Nuclear Extracts were assayed from 0 to 50 µg per well in duplicate. The purple line represents activity from untreated extracts, while the copper line represents extracts treated with 1 µM Trichostatin A inhibitor.

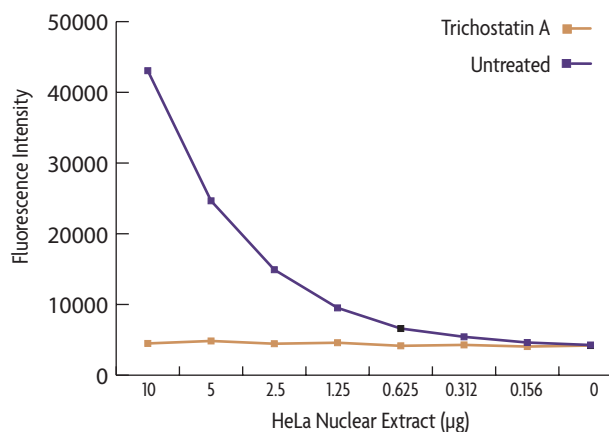


Figure 2: Fluorescent HDAC Assay Results.

HeLa Nuclear Extracts were assayed from 0 to 10 µg per well in duplicate. The purple line represents activity from untreated extracts, while the copper line represents extracts treated with 1 µM Trichostatin A inhibitor.

CONTENTS & STORAGE

Store the HeLa nuclear extract at -80°C. Store all other components at -20°C. All reagents are guaranteed stable for 6 months from date of receipt when stored properly.

Product	Format	Catalog No.
HDAC Assay Kit (Fluorescent)	1 x 96 rxns	56200
HDAC Assay Kit (Colorimetric)	1 x 96 rxns	56210