

Histone Acetyltransferase (HAT) Assay Kit

screen inhibitors or calculate HAT activity

The Histone Acetyltransferase Assay Kit is a fluorescent method that makes it easy to assay samples for histone acetyltransferase (HAT) activity, or to screen HAT inhibitors. The assay features a simple protocol that gives you results in 30 minutes, and it is ideal for high-throughput usage in 96-well plates.

Fluorescent HAT Assay Advantages

The HAT Assay Kit includes enough recombinant human p300 to screen 96 wells of inhibitor compounds; anacardic acid is included for use as a control, as it is a potent HAT inhibitor. All assay buffers have been thoroughly tested to ensure that no components interfere with either activity or inhibition assays. Histone H3 and Histone H4 N-terminal peptides are included as HAT substrates, so you can use the one best suited for your HAT enzyme.

- Sensitive fluorescent readout excitation 384 nm; emission 469 nm
- Calculate specific activity with a simple standard curve
- Screen a full plate of HAT inhibitor compounds

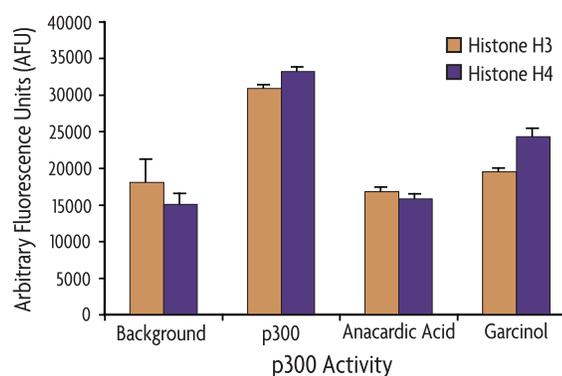


Figure 1: p300 activity and inhibition.

The HAT activity of 50 ng of p300 was assayed with 50 μ M acetyl-CoA and either 50 μ M Histone H3 or Histone H4 peptide as the substrate. Activity was inhibited with 15 μ M anacardic acid or 25 μ M garcinol.

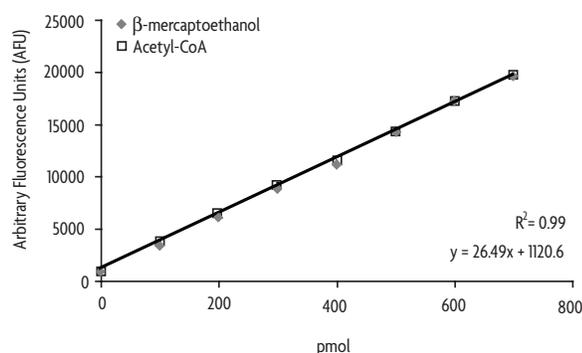


Figure 2: Standard curve to calculate activity.

Acetyl-CoA and β -mercaptoethanol were diluted from 0 to 14 μ M and used to create a standard curve that can be used to calculate HAT activity.

CONTENTS & STORAGE

1 x 96 rxns of recombinant p300 protein, catalytic domain; histone H3 and H4 substrate peptides, Acetyl-CoA, 5X Assay Buffer, Developer and Developing & Stop Solutions. A 96-well plate and plate sealer are also included. Recombinant p300 protein, catalytic domain; and Acetyl-CoA are to be stored at -80°C . Store histone H3 and H4 substrate peptides, 5X Assay Buffer, Developer and Developing Solution at -20°C . Stop Solution, the 96-well plate and plate sealer may be stored at room temperature. All reagents are guaranteed stable for 6 months from date of receipt when stored properly.

Product	Format	Catalog No.
Histone Acetyltransferase (HAT) Assay Kit	1 x 96 rxns	56100
Recombinant p300, catalytic domain	5 μ g	31205
Recombinant GCN5 protein, active	5 μ g	31204