HDAC3:SMRT Fluorescent Probe 2-FAM-InsP5 Small Molecule (Tool Compound)

Catalogue number: 153334
Sub-type: Fluorescent Probe
Images:

Contributor

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Institute: University of Bath
Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: HDAC3:SMRT Fluorescent Probe 2-FAM-InsP5 Small Molecule (Tool Compound)

Alternate name: HDACs; Histone deacetylases; SMRT; silencing mediator for retinoid or thyroid-hormone receptors; Nuclear receptor co-repressor 2; NCOR2; HDAC:SMRT3; 2-FAM-InsP5; T_3 receptor-associating cofactor 1; TRAC-1

Class:
Conjugate:
Description: Class I histone deacetylase (HDAC) enzymes are involved in epigenetic gene regulation by controlling acetylation of lysine sidechains in histone tails They form a catalytic subunit for other large protein complexes that repress gene expression when targeted to genomic DNA. The Class I HDAC family includes HDACs 1, 2, 3 & 8, however only HDAC3 is recruited exclusively to the SMRT co-repressor complex. Functional and structural studies of HDACs when bound to their cognate corepressors has reve...
Purpose:
Parental cell:
Organism:
Tissue:
Model:
Gender:
Isotype:
Reactivity:
Selectivity:
Host:
Immunogen:
Immunogen UNIPROT ID:

Sequence:
Growth properties:
Production details:
Formulation:
Recommended controls:
Bacterial resistance:
Selectable markers:
Additional notes:

Target details

Target:

Target alternate names:

Target background:

Molecular weight: 1436 g/mol

Ic50:

Applications

Application: 2-FAM-InsP_5 [2-FAM-Ins(1,3,4,5,6)P_5] is a fluorescent derivative of Ins(1,3,4,5,6)P_5. 2-FAM-InsP_5 activates the HDAC3:SMRT complex in a similar manner to the natural ligand, Ins(1,4,5,6)P_4. The binding constant (Kd) for binding of 2-FAM-InsP_5 to HDAC3:SMRT measured by a direct binding assay, 0.3 Â? 0.01 Î?M, was approximately 10-fold lower than the Kd_{app} for activation of the catalytic activity of HDAC3:SMRT by Ins(...
Application notes:

Handling

Format:
Concentration:
Passage number:
Growth medium:
Temperature:
Atmosphere:
Volume:
Storage medium:
Storage buffer:
Storage conditions: -20° C, protect from light
Shipping conditions: Dry Ice

Related tools

Related tools:

References

References: Brown et al. 2012. Cancer Genet. 205(6):319-26. PMID: 22749038. ; Characterization of 17.94, a novel anaplastic Wilms' tumor cell line.