

Green HDAC2 fluorometric drug discovery assay Kit

Cat. No. Kit-0421 **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Useful for inhibitor screening or characterizing enzyme kineticsIncludes optimal substrate selected from a panel of acetylated sites in p53 and histonesSupplied with enough recombinant enzyme for 96 assays (1 x 96-well plate)
Size	96 wells
Description	The HDAC2 Fluorescent Activity Assay/Drug Discovery Kit is a complete assay system designed to measure the lysyl deacetylase activity of the recombinant human HDAC2 included in the kit. The kit is ideal for chemical library screening for candidate inhibitors or kinetic assay of the enzyme under varying conditions. The FLUOR DE LYS-Green HDAC2 assay is based on the FLUOR DE LYS-Green Substrate and FLUOR DE LYS Developer combination. The assay procedure has two steps. First, the FLUOR DE LYS-Green Substrate, which comprises an acetylated lysine side chain, is incubated with HDAC2. Deacetylation of the substrate sensitizes the substrate so that, in the second step, treatment with the FLUOR DE LYS Developer produces a fluorophore. FLUOR DE LYS-Green is an especially sensitive substrate for HDAC2. Activity can readily be measured with enzyme amounts in the range of 1-10 ng/well (0.36-3.6 nM in 50 ml), thus enabling IC₅₀ determinations for high affinity inhibitors. The assay is highly suitable for high-throughput screening, with a Z'-factor of 0.74.
Applications	Fluorescence microscopy, HTS. Study of enzyme kinetics, modulator activity, drug discovery.

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Storage	-80°C
Kit Components	HDAC2 (Histone Deacetylase 2) (human, recombinant) (67µL; 30ng/µL in 50mM TRIS, pH 8.0, 138mM NaCl, 10% glycerol, 1mg/ml BSA)Storage: -70°C. Avoid freeze/thaw cycles! FLUOR DE LYS-Green substrate (50µL; 50mM in DMSO)Storage: -70°C FLUOR DE LYS Developer concentrate (20x) (300µL; 20x Stock solution; Dilute in Assay Buffer before use.)Storage: -70°C Trichostatin A (HDAC Inhibitor) (100µL; 0.2mM in DMSO)Storage: -70°C FLUOR DE LYS-Green Standard (30µl1mM in DMSO)Storage: -70°C. Note: BML-KI605 is an improved replacement of BML-KI573. HDAC Assay Buffer II (20ml; 50mM TRIS/Cl, pH 8.0, 137mM NaCl, 2.7mM KCl, 1mM MgCl₂, 1mg/ml BSA)Storage: -70°C 1/2 volume black NBS microplate Storage: Room temperature 1/2 volume white NBS microplateStorage: Room temperature