Valproic acid, sodium salt ab120745

Overview

**Product name**  Valproic acid, sodium salt

**Description**  Histone deacetylase inhibitor

**Biological description**  Histone deacetylase inhibitor (IC$_{50}$ = 0.4 μM for HDAC1). Increases GABA expression and activates Wnt dependent gene expression. Centrally active upon oral and intravenous administration.

Properties

**Chemical name**  Sodium 2-propylpentanoate

**Molecular weight**  166.20

**Chemical structure**

![Chemical structure](image)

**Molecular formula**  C$_8$H$_{15}$NaO$_2$

**CAS Number**  1069-66-5

**Storage instructions**  Store at Room Temperature. Store under desiccating conditions. The product can be stored for up to 12 months.

**Solubility overview**  Soluble in water to 100 mM

**Handling**  Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.

Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.

**Source**  Synthetic

Applications

Our Abpromise guarantee covers the use of ab120745 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
Functional Studies

Use at an assay dependent concentration.

Images

ab70362 staining adiponectin receptor 1 in HepG2 cells treated with valproic acid, sodium salt (ab120745), by ICC/IF. Increased cytoplasmatic staining of adiponectin receptor 1 correlates with increased concentration of valproic acid, as described in literature. The cells were incubated at 37°C for 24h in media containing different concentrations of ab120745 (valproic acid) in DMSO, fixed with 4% formaldehyde for 10 minutes at room temperature and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with ab70362 (5 μg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-rabbit polyclonal antibody (ab96899) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE, NOT FOR USE IN HUMANS"

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