Domoic acid, Kainate agonist ab120338

Overview

Product name: Domoic acid, Kainate agonist
Description: Kainate agonist. Neurotoxin.
Biological description: Neurotoxic phycotoxin. Potent agonist at kainate receptors.
Purity: > 98%
CAS Number: 14277-97-5
Chemical structure:

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\begin{align*}
\text{Chemical name: (2S,3S,4R,5'R)} &\text{-} 2\text{-Carboxy-4-(5'}\text{-carboxy-1'}\text{-methyl-1Z,3E-hexadienyl)-3-pyrrolidineacetic acid} \\
\text{Molecular weight:} &\text{311.33} \\
\text{Molecular formula:} &\text{C}_{15}\text{H}_{21}\text{NO}_{6} \\
\text{PubChem identifier:} &\text{5282253} \\
\text{Storage instructions:} &\text{Store at -20°C. It is important to note that this product is reported to be light sensitive. Store in the dark. Store under desiccating conditions.} \\
\text{Solubility overview:} &\text{Soluble in water to 25 mM} \\
\text{Handling:} &\text{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.} \\
\text{SMILES:} &\text{CC(=CC=C[C@H](C)C(=O)O)[C@H]1CN[C@H][C@H]1CC(=O)O)C(=O)O}
\end{align*}
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Applications

Our Abpromise guarantee covers the use of ab120338 in the following tested applications.
Functional Studies - Domoic acid, Kainate agonist (ab120338)

ab76003 staining MMP9 in U87-MG cells treated with domoic acid (ab120338), by ICC/IF. Increase of MMP9 expression correlates with increased concentration of domoic acid, as described in literature.

The cells were incubated at 37°C for 6h in media containing different concentrations of ab120338 (domoic 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 ab76003 (1/200) dilution was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 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. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

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