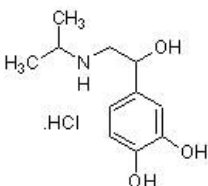


Product datasheet

Isoprenaline hydrochloride (Isoproterenol), Non-selective beta adrenoceptor agonist **ab120710**

[2 Images](#)

Overview

Product name	Isoprenaline hydrochloride (Isoproterenol), Non-selective beta adrenoceptor agonist
Description	Non-selective β adrenoceptor agonist
Biological description	Non-selective β adrenoceptor agonist. Structurally similar to adrenaline. Stimulates MAPK activation through cAMP dependent kinases (EC_{50} = 1-3 μ M). Systemically active upon subcutaneous administration. Also available in simple stock solutions (ab146724) - add 1 ml of water to get an exact, ready-to-use concentration.
Purity	> 98%
CAS Number	51-30-9
Chemical structure	

Properties

Chemical name	4-[1-Hydroxy-2-[(1-methylethyl)amino]ethyl]-1,2-benzenediol hydrochloride
Molecular weight	247.72
Molecular formula	$C_{11}H_{17}NO_3 \cdot HCl$
Storage instructions	Store at Room Temperature. 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 $-20^{\circ}C$. 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

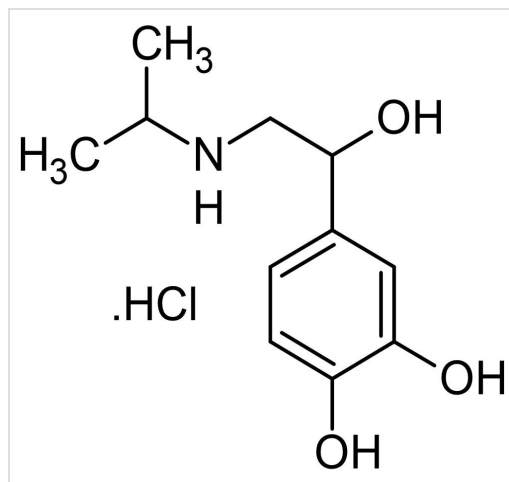
The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab120710 in the following tested applications.

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

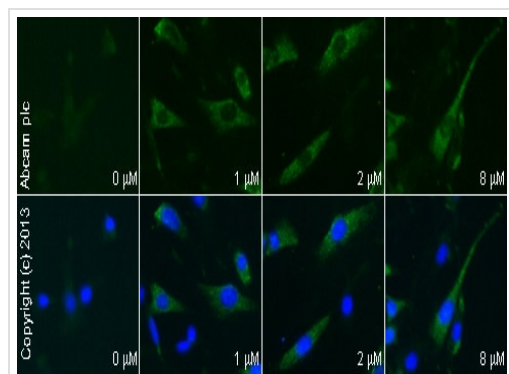
Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

Images



Chemical Structure - Isoprenaline hydrochloride (Isoproterenol), Non-selective beta adrenoceptor agonist (ab120710)

2D chemical structure image of ab120710, Isoprenaline hydrochloride (Isoproterenol), Non-selective beta adrenoceptor agonist



Functional Studies - Isoprenaline hydrochloride (Isoproterenol), Non-selective beta adrenoceptor agonist (ab120710)

[ab62153](#) staining HSL pSer855 in NIH-3T3 cells treated with isoprenaline hydrochloride (ab120710), by ICC/IF. Increase of HSL pSer855 expression correlates with increased concentration of isoprenaline hydrochloride, as described in literature.

The cells were incubated at 37°C for 30 minutes in media containing different concentrations of ab120710 (isoprenaline hydrochloride) 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 [ab62153](#) (5 μg/ml) 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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