abcam

Product datasheet

Orexin A (bovine, human, mouse, rat), Neuropeptide involved in feeding and sleep ab120212

3 References 2 Images

Overview

Product name Orexin A (bovine, human, mouse, rat), Neuropeptide involved in feeding and sleep

Description Neuropeptide involved in feeding and sleep

Biological description Hypothalamic neuropeptide involved in the regulation of feeding, sleep and wakefulness.

CAS Number 205640-90-0

Chemical structure GIp-Pro-Leu-Pro-Asp-Cys-Cys-Arg-GIn-Lys-Thr-

Cys-Ser-Cys-Arg-Leu-Týr-Glu-Leu-Leu-His-Gly-Ala-Gly-Asn-His-Ala-Ala-Gly-lle-Leu-Thr-Leu-NH₂

(Disulfide bridges: 6-12 and 7-14)

Properties

Molecular weight 3561.12

Molecular formula $C_{152}H_{243}N_{47}O_{44}S_4$

Sequence XPLPDCCRQKTCSCRLYELLHGAGNHAAGILTL (Modifications: C-terminal amide; X-1 = Glp;

Disulfide bonds: 6-12, 7-14)

PubChem identifier 56842143

Storage instructions Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12

months.

Solubility overview Soluble in water to 1mg/ml

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 week. 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

1

The Abpromise quarantee

Our Abpromise guarantee covers the use of ab120212 in the following tested applications.

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

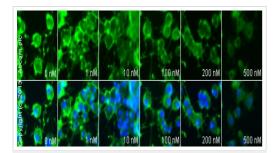
Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

Images

Glp-Pro-Leu-Pro-Asp-Cys-Cys-Arg-Gln-Lys-Thr-Cys-Ser-Cys-Arg-Leu-Tyr-Glu-Leu-Leu-His-Gly-Ala-Gly-Asn-His-Ala-Ala-Gly-Ile-Leu-Thr-Leu-NH₂ (Disulfide bridges: 6-12 and 7-14)

Chemical Structure - Orexin A (bovine, human, mouse, rat), Neuropeptide involved in feeding and sleep (ab120212)

2D chemical structure image of ab120212, Orexin A (bovine, human, mouse, rat), Neuropeptide involved in feeding and sleep



Immunocytochemistry/ Immunofluorescence Orexin A (bovine, human, mouse, rat), Neuropeptide involved in feeding and sleep (ab120212)

<u>ab6211</u> staining tyrosine hydroxylase in PC-12 cells treated with orexin A (ab120212), by ICC/IF. Decrease in expression of tyrosine hydroxylase correlates with increased concentration of orexin A, as described in literature.

The cells were incubated at 37°C for 1h in media containing different concentrations of ab120212 (orexin A) 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 ab6211 (1/1000 dilution) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat antirabbit 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"

Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- · Guarantee only valid for products bought direct from Abcam or one of our authorized distributors
- Abcam biochemicals are novel compounds and we have not tested their biological activity in house. Please use the literature to identify how to use these products effectively. If you require further assistance please contact the scientific support team