Product datasheet

Anti-ProDynorphin antibody ab10280

Overview

Product name  Anti-ProDynorphin antibody
Description  Guinea pig polyclonal to ProDynorphin
Host species  Guinea pig
Tested applications  Suitable for: IHC-Fr
Species reactivity  Reacts with: Mouse, Rat
Immunogen  Synthetic peptide:
SQENPNTYSEDLDV,
, corresponding to amino acids 235-248 of Rat ProDynorphin

General notes

The protein encoded by this gene is a preproprotein that is proteolytically processed to form the secreted opioid peptides beta-neoendorphin, dynorphin, leu-enkephalin, rimorphin, and leumorphin. These peptides are ligands for the kappa-type of opioid receptor. Dynorphin is involved in modulating responses to several psychoactive substances, including cocaine.

Properties

Form  Liquid
Storage instructions  Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer  Preservative: 0.05% Sodium azide
Constituent: PBS
Purity  Protein A purified
Primary antibody notes  The protein encoded by this gene is a preproprotein that is proteolytically processed to form the secreted opioid peptides beta-neoendorphin, dynorphin, leu-enkephalin, rimorphin, and leumorphin. These peptides are ligands for the kappa-type of opioid receptor. Dynorphin is involved in modulating responses to several psychoactive substances, including cocaine.
Clonality  Polyclonal
Isotype  IgG
### Function
Leu-enkephalins compete with and mimic the effects of opiate drugs. They play a role in a number of physiologic functions, including pain perception and responses to stress.

Dynorphin peptides differentially regulate the kappa opioid receptor. Dynorphin A(1-13) has a typical opioid activity, it is 700 times more potent than Leu-enkephalin.

Leumorphin has a typical opioid activity and may have anti-apoptotic effect.

### Involvement in disease
Defects in PDYN are the cause of spinocerebellar ataxia type 23 (SCA23) [MIM:610245].

Spinocerebellar ataxia is a clinically and genetically heterogeneous group of cerebellar disorders. Patients show progressive incoordination of gait and often poor coordination of hands, speech and eye movements, due to degeneration of the cerebellum with variable involvement of the brainstem and spinal cord. SCA23 is an adult-onset autosomal dominant form characterized by slowly progressive gait and limb ataxia, with variable additional features, including peripheral neuropathy and dysarthria.

### Sequence similarities
Belongs to the opioid neuropeptide precursor family.

### Post-translational modifications
The N-terminal domain contains 6 conserved cysteines thought to be involved in disulfide bonding and/or processing.

### Cellular localization
Secreted.

### Images
![Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-ProDynorphin antibody (ab10280)](image)

ab10280, at a dilution of 1/500, staining ProDynorphin in rat supraoptic nucleus region by Immunohistochemistry (PFA perfusion fixed frozen sections).

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