BACKGROUND

Endogenous opioid peptides and opiates like morphine mediate their cellular effects through membrane bound receptors. Three different types of opioid receptors have been identified, μ-type, δ-type and κ-type. A fourth opioid receptor, KOR-3 (κ-type opioid receptor, also designated ORL1-opioid receptor Like 1), has been identified. Though closely related genetically to the other opioid receptors, KOR-3 has a distinct pharmacological profile. Nociceptin, the neuropeptide which activates KOR-3, is structurally similar to the κ-opioid peptide dynorphin A, but quite different in its mode of interaction with its receptor. KOR-3 is widely expressed in the nervous system, and is likely to modulate a broad range of physiological and behavioral functions.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: OPRL1 (human) mapping to 20q13.33; Oprl1 (mouse) mapping to 2 H4.

SOURCE

KOR-3 (A-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of KOR-3 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-9760 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

KOR-3 (A-18) is recommended for detection of KOR-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

KOR-3 (A-18) is also recommended for detection of KOR-3 in additional species, including equine.

Suitable for use as control antibody for KOR-3 siRNA (h): sc-42150, KOR-3 siRNA (m): sc-42151, KOR-3 shRNA Plasmid (h): sc-42150-SH, KOR-3 shRNA Plasmid (m): sc-42151-SH, KOR-3 shRNA (h) Lentiviral Particles: sc-42150-V and KOR-3 shRNA (m) Lentiviral Particles: sc-42151-V.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended:


SELECT PRODUCT CITATIONS


STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.