

Product datasheet

Recombinant Human TRPV1 protein ab159807

1 Image

Description

| | | |
|--------------------------|--|--|
| Product name | Recombinant Human TRPV1 protein | |
| Expression system | Wheat germ | |
| Accession | Q8NER1 | |
| Protein length | Protein fragment | |
| Animal free | No | |
| Nature | Recombinant | |
| Species | Human | |
| Sequence | CPDPLDGDPNRPPPAKPQLSTAKSRTRLFGKGDSEEA FPVDCPHEEGEL DSCPTITVSPVITIQRPDGPDTGARLLSQDSVAASTEKTLR LYDRRSIFE AVAQ | |
| Amino acids | 21 to 124 | |
| Tags | GST tag N-Terminus | |

Specifications

Our [Abpromise guarantee](#) covers the use of **ab159807** in the following tested applications.

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

| | |
|---------------------|--------------|
| Applications | Western blot |
| | ELISA |

| | |
|-------------|--------|
| Form | Liquid |
|-------------|--------|

Additional notes

Preparation and Storage

| | |
|------------------------------|--|
| Stability and Storage | Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl |
|------------------------------|--|

General Info

Function

Receptor-activated non-selective calcium permeant cation channel involved in detection of noxious chemical and thermal stimuli. Seems to mediate proton influx and may be involved in intracellular acidosis in nociceptive neurons. May be involved in mediation of inflammatory pain and hyperalgesia. Sensitized by a phosphatidylinositol second messenger system activated by receptor tyrosine kinases, which involves PKC isozymes and PCL. Acts as ionotropic endocannabinoid receptor with central neuromodulatory effects. Triggers a form of long-term depression (TRPV1-LTD) mediated by the endocannabinoid anandamine in the hippocampus and nucleus accubens by affecting AMPA receptors endocytosis.

Tissue specificity

Widely expressed at low levels. Expression is elevated in dorsal root ganglia. In skin, expressed in cutaneous sensory nerve fibers, mast cells, epidermal keratinocytes, dermal blood vessels, the inner root sheet and the infundibulum of hair follicles, differentiated sebocytes, sweat gland ducts, and the secretory portion of eccrine sweat glands (at protein level).

Sequence similarities

Belongs to the transient receptor (TC 1.A.4) family. TrpV subfamily. TRPV1 sub-subfamily. Contains 6 ANK repeats.

Domain

The association domain (AD) is necessary for self-association.

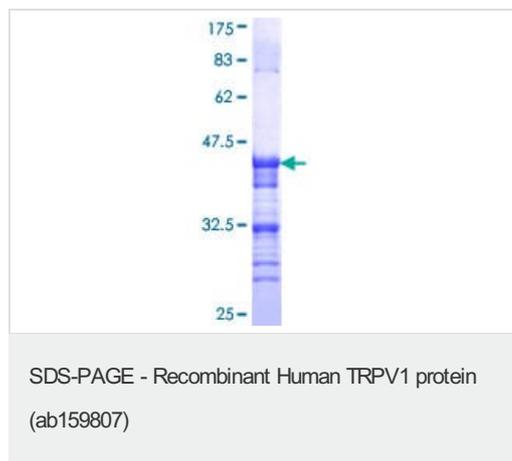
Post-translational modifications

Phosphorylation by PKA reverses capsaicin-induced dephosphorylation at multiple sites, probably including Ser-117 as a major phosphorylation site. Phosphorylation by CAMKII seems to regulate binding to vanilloids. Phosphorylated and modulated by PKCM and probably PKCZ. Dephosphorylation by calcineurin seems to lead to receptor desensitization and phosphorylation by CAMKII recovers activity.

Cellular localization

Cell junction > synapse > postsynaptic cell membrane. Cell projection > dendritic spine membrane.

Images



ab159807 on a 12.5% SDS-PAGE stained with Coomassie Blue.

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