Product datasheet

Anti-VR1 antibody ab31895

Product name: Anti-VR1 antibody
Description: Rabbit polyclonal to VR1
Host species: Rabbit
Tested applications: Suitable for: IHC (PFA fixed), IHC-P, IHC-Fr
Species reactivity: Reacts with: Mouse, Rat
Predicted to work with: Guinea pig
Immunogen: Synthetic peptide: (C)EDAEVFKDSMAPGEK conjugated to KLH, corresponding to C terminal amino acids 825 - 839 of Mouse TRPV1
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: Constituent: Whole serum
Purity: Whole antiserum
Clonality: Polyclonal
Isotype: IgG

Properties

Applications

Our Abpromise guarantee covers the use of ab31895 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tbody>
<tr>
<td>IHC (PFA fixed)</td>
<td>1/1000.</td>
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**Target**

**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**

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<td>IHC-P</td>
<td>1/1000.</td>
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<tr>
<td>IHC-Fr</td>
<td>1/400. PubMed: 19153713</td>
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**Images**

ab31895 at 1/1000 demonstrating VR1 immunoreactivity in mouse dorsal root ganglion. Animals were perfusion fixed with 2% paraformaldehyde.
ab31895 staining mouse inferior olive using Cy3-conjugated donkey anti-rabbit secondary antibodies (red color) and DAPI (blue) as a nuclear counterstain.

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