10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TRPA1 Antibody (Internal)
Rabbit Polyclonal Antibody
Catalog # ALS11064

Specification

TRPA1 Antibody (Internal) - Product Information

Application	**IHC**
Primary Accession	O75762
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**128kDa KDa**

TRPA1 Antibody (Internal) - Additional Information

Gene ID 8989

Other Names
Transient receptor potential cation channel subfamily A member 1, Ankyrin-like with transmembrane domains protein 1, Transformation-sensitive protein p120, TRPA1, ANKTM1

Target/Specificity
Human TRPA1. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage
Long term: -70°C; Short term: +4°C

Precautions
TRPA1 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

TRPA1 Antibody (Internal) - Protein Information

Name TRPA1 (HGNC:497)

Function
Receptor-activated non-selective cation channel involved in pain detection and possibly also in cold perception, oxygen concentration perception, cough, itch, and inner ear function (PubMed:21873995, PubMed:23199233, PubMed:25389312, PubMed:25855297). Shows 8-fold preference for divalent over monovalent cations (PubMed:31447178). Has a central role in the pain response to endogenous inflammatory mediators and to a diverse array of irritants, such as allylthiocyanate (AITC) from mustard oil or wasabi, cinnamaldehyde, diallyl disulfide (DADS) from garlic, and acrolein, an irritant from tears gas and vehicle exhaust fumes

(PubMed:25389312, PubMed:27241698, PubMed:30878828, PubMed:20547126). Acts also as an ionotropic cannabinoid receptor by being activated by delta(9)-tetrahydrocannabinol (THC), the psychoactive component of marijuana (PubMed:25389312). Is activated by a large variety of structurally unrelated electrophilic and non-electrophilic chemical compounds. Electrophilic ligands activate TRPA1 by interacting with critical N- terminal Cys residues in a covalent manner, whereas mechanisms of non- electrophilic ligands are not well determined. May be a component for the mechanosensitive transduction channel of hair cells in inner ear, thereby participating in the perception of sounds. Probably operated by a phosphatidylinositol second messenger system (By similarity).

Cellular Location
Cell membrane; Multi-pass membrane protein

Tissue Location
Expressed at very low levels in fibroblasts.

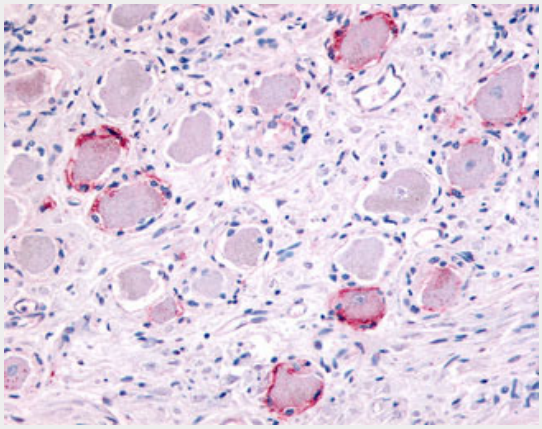
Volume
50 µl

TRPA1 Antibody (Internal) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TRPA1 Antibody (Internal) - Images



Anti-TRPA1 antibody ALS11064 IHC of human ganglion cells.

TRPA1 Antibody (Internal) - Background

Receptor-activated non-selective cation channel involved in detection of pain and possibly also in cold perception and inner ear function. Has a central role in the pain response to endogenous inflammatory mediators and to a diverse array of volatile irritants, such as mustard oil, garlic and acrolein, an irritant from tears gas and vehicule exhaust fumes. Acts also as a ionotropic cannabinoid receptor by being activated by delta(9)- tetrahydrocannabinol (THC), the psychoactive component of marijuana. Not involved in menthol sensation. May be a component for the mechanosensitive transduction channel of hair cells in inner ear, thereby participating in the perception of sounds. Probably operated by a phosphatidylinositol second messenger system (By similarity).

TRPA1 Antibody (Internal) - References

Jaquemar D.,et al.J. Biol. Chem. 274:7325-7333(1999).
Nusbaum C.,et al.Nature 439:331-335(2006).
Kremeyer B.,et al.Neuron 66:671-680(2010).