

Anti-TRPA1 antibody



Description Unconjugated Rabbit polyclonal to TRPA1

Model STJ193121

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, WB

Gene ID 8989

Gene Symbol TRPA1

Dilution range WB 1:500-2000 ELISA 1:5000-20000

Specificity TRPA1 Polyclonal Antibody detects endogenous levels of protein.

Tissue Specificity Expressed at very low level. Expressed at very low level in human fibroblasts

and at a moderate level in liposarcoma cells.

Purification TRPA1 antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Transient receptor potential cation channel subfamily A member 1 Ankyrin-

like with transmembrane domains protein 1 Transformation-sensitive protein

p120

Molecular Weight 123 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:4970MIM:604775</u>

Alternative Names Transient receptor potential cation channel subfamily A member 1 Ankyrin-

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p120

Function 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, cinnamaldehyde, garlic and acrolein, an irritant from tears gas and vehicule exhaust fumes . Is also activated by menthol (in vitro). Acts also as a ionotropic cannabinoid receptor by being activated by delta(9)-tetrahydrocannabinol (THC), the psychoactive component of marijuana . 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.

Sequence and Domain Family C-terminal helices from the four subunits associate to form atypical coiled coil

structure; this region is probably involved in binding the inositol

polyphosphates that are required for optimal channel activity (in vitro). The ANK repeat domain consists of a convex stem structure formed by five ANK repeats and 11 additional ANK repeats that form a crescent-shaped structure

TRPA1 activation by electrophiles occurs though covalent modification of

that surrounds the protein core.

Cellular Localization Cell membrane

Modifications specific cysteine residues in the N-terminal cytoplasmic domain.

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Post-translational

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