

Datasheet for ABIN351107

anti-TRPA1 antibody (AA 1050-1120)[Go to Product page](#)**1** Image**2** Publications

Overview

Quantity:	500 µg
Target:	TRPA1
Binding Specificity:	AA 1050-1120
Reactivity:	Rat
Host:	Sheep
Clonality:	Polyclonal
Conjugate:	This TRPA1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	A synthetic peptide from AA 1050-1120 of rat TRPA1 conjugated to blue carrier protein was used as the antigen. The antigen is homologous in mouse.
Isotype:	IgG
Specificity:	Specific for TRPA1.
Cross-Reactivity:	Mouse, Rat
Cross-Reactivity (Details):	Other species not yet tested.
Purification:	IgG

Target Details

Target:	TRPA1
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Target Details

Alternative Name: TRPA1 ([TRPA1 Products](#))

Background: The structure of the protein encoded by this gene is highly related to both the protein ankyrin and transmembrane proteins. The specific function of this protein has not yet been determined, however, studies indicate the function may involve a role in signal transduction and growth control. TISSUE SPECIFICITY: Expressed in inner ear. In inner ear, it is found in the distal half of stereocilia, along the length of the kinocilium and at high level in the pericuticular zone (at protein level). Specifically expressed in a subset of nociceptive neurons. Expressed in the same neurons that TRPV1. In contrast, it is not expressed in neurons expressing TRPM8. Expressed in the superior cervical ganglion. DEVELOPMENTAL STAGE: During utricle development, it is first expressed at E15 and E16 and peaks at E17. It drops at E18 but increases again at E19, possibly corresponding to a second wave of hair cells that are generated at E15. Inhibited by ruthenium red, a potent blocker of TRPV channels.,Mammalian TRPA,Transient receptor potential cation channel subfamily A member 1, ankyrin-like with transmembrane domains protein 1, transformation sensitive protein p120, ANKTM1

UniProt: [Q6RI86](#)

Application Details

Application Notes: IHC, WB. A concentration of 10-50 µg/ml is recommended. The optimal concentration should be determined by the end user. Not yet tested in other applications.

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Reconstitute in 500 µL of sterile water. Centrifuge to remove any insoluble material.

Handling Advice: Avoid freeze and thaw cycles.

Storage: 4 °C/-20 °C

Storage Comment: Maintain the lyophilised/reconstituted antibodies frozen at -20°C for long term storage and refrigerated at 2-8°C for a shorter term. When reconstituting, glycerol (1:1) may be added for an additional stability. Avoid freeze and thaw cycles.

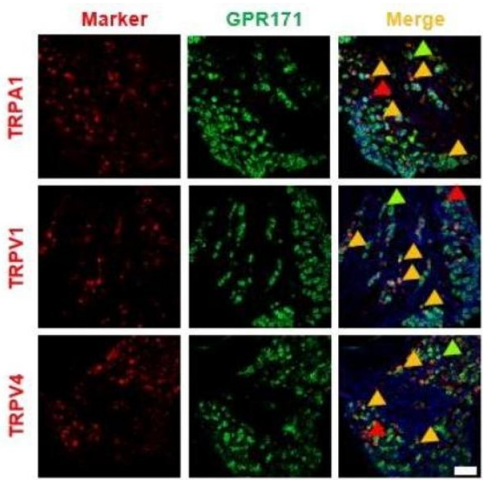
Expiry Date: 12 months

Publications

Product cited in: Cho, Lee, Choi, Choi, Lim, Kim, Kim, Jung, Hwang: "GPR171 Activation Modulates Nociceptor Functions, Alleviating Pathologic Pain." in: **Biomedicines**, Vol. 9, Issue 3, (2021) ([PubMed](#)).

Nagy, Lynn, Senecal, Stecina: "Connexin36 Expression in Primary Afferent Neurons in Relation to the Axon Reflex and Modality Coding of Somatic Sensation." in: **Neuroscience**, Vol. 383, pp. 216-234, (2018) ([PubMed](#)).

Images



Immunostaining

Image 1. Double immunostaining of GPR171 expressions in Transient receptor potential (TRP)-expresser neurons and the effect on TRP-mediated nociceptions of GPR171 activation. (A) Double immunostaining of GPR171 with TRP channels in the lumbar DRGs (scale bar, 50 μ m). Source: 10.3390/biomedicines9030256