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MRGX4 Polyclonal Antibody

Catalog # AP71020

Product Information

Application	WB, IHC-P
Primary Accession	Q96LA9
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36461

Additional Information

Gene ID	117196
Other Names	MRGPRX4; MRGX4; SNSR5; SNSR6; Mas-related G-protein coupled receptor member X4; Sensory neuron-specific G-protein coupled receptor 5/6
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

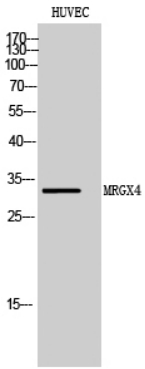
Name	MRGPRX4
Function	G protein-coupled receptor for bile acids, which is specifically expressed in sensory neurons of dorsal root ganglion and is involved in itch perception (PubMed:31068464, PubMed:31500698, PubMed:34789874, PubMed:38718132, PubMed:39476841). Activated by bile acids, such as deoxycholate, chenodeoxycholate, taurocholate, taurodeoxycholate and taurodeoxycholate (PubMed:31068464, PubMed:31500698, PubMed:39476841). Has a preference for 3-sulfated bile acids, such as deoxycholate 3-sulfate, glycoursodeoxycholate 3-sulfate and tauroursodeoxycholate 3-sulfate, which are present at high level in cholestatic patients with itch symptoms (PubMed:39476841). Bile acid- binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors (PubMed:30768591, PubMed:31068464, PubMed:31500698, PubMed:34789874, PubMed:38718132, PubMed:39476841). MRGPRX4 is coupled to G(q)/G(11) G alpha proteins and activates phospholipase C-beta, releasing diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) second messengers that modulate the activity of phosphatidylinositol 3-kinase and

	promote the release of Ca2+ ions from intracellular stores, respectively (PubMed:30768591, PubMed:31068464, PubMed:31500698, PubMed:34789874, PubMed:38718132, PubMed:39476841).
Cellular Location	Cell membrane; Multi-pass membrane protein
Tissue Location	Uniquely localized in a subset of small dorsal root and trigeminal sensory neurons.

Background

Orphan receptor. Probably involved in the function of nociceptive neurons. May regulate nociceptor function and/or development, including the sensation or modulation of pain. Potently activated by enkephalins (By similarity).

Images



Western Blot analysis of HUVEC cells using MRGX4 Polyclonal Antibody

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.