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Anti-NaBC1 Antibody

Catalog # AP59880

Product Information

Application	WB
Primary Accession	Q8NBS3
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	98181

Additional Information

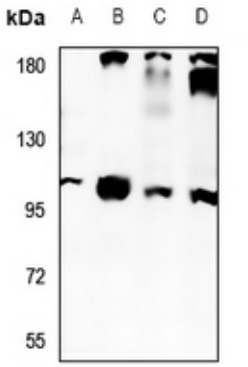
Gene ID	83959
Other Names	BTR1; Sodium bicarbonate transporter-like protein 11; Bicarbonate transporter-related protein 1; Sodium borate cotransporter 1; NaBC1; Solute carrier family 4 member 11
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human NaBC1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	SLC4A11
Synonyms	BTR1
Function	Multifunctional transporter with an impact in cell morphology and differentiation. In the presence of borate B(OH)4(-), acts as a voltage-dependent electrogenic Na(+)-coupled B(OH)4(-) cotransporter controlling boron homeostasis (PubMed:15525507). At early stages of stem cell differentiation, participates in synergy with ITGA5-ITGB1 and ITGAV-ITGB3 integrins and BMPR1A to promote cell adhesion and contractility that drives differentiation toward osteogenic commitment while inhibiting adipogenesis (By similarity). In the absence of B(OH)4(-), acts as a Na(+)-coupled OH(-) or H(+) permeable channel with implications in cellular redox balance (PubMed:15525507, PubMed:28642546). Regulates the oxidative stress response in corneal endothelium by enhancing antioxidant defenses and protecting cells from reactive oxygen species (PubMed:28642546). In

	response to hypo-osmotic challenge, also acts as a water permeable channel at the basolateral cell membrane of corneal endothelial cells and facilitates transendothelial fluid reabsorption in the aqueous humor (PubMed:23813972, PubMed:25007886, PubMed:31273259). In the presence of ammonia, acts as an electrogenic NH3/H(+) cotransporter and may play a role in ammonia transport and reabsorption in renal Henle's loop epithelium (PubMed:27581649).
Cellular Location	Cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein
Tissue Location	Widely expressed. Highly expressed in kidney, testis, salivary gland, thyroid, trachea and corneal endothelium. Not detected in retina and lymphocytes. [Isoform 5]: The predominant isoform in corneal endothelium (at protein level).

Images



Western blot analysis of NaBC1 expression in mouse testis (A), PC12 (B), A549 (C), LO2 (D) whole cell lysates. (Predicted band size: 98 kD; Observed band size: 100 kD)

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