

# Rabbit Anti-BTR1 antibody

# SL13714R

D 1 4 N	DED 1
Product Name:	BTR1
Chinese Name:	钙粘蛋白相关蛋白受体BTR1抗体
Alias:	BT R1; NaBC1; SLC4A11; sodium bicarbonate transporter-like protein 11; solute
	carrier family 4 member 11; S4A11_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Cow, Horse, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-
	500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	100kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human BTR1:751-850/891
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized
	antibody is stable at room temperature for at least one month and for greater than a year
	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	BtR1 is a cadherin receptor from the tobacco hornworm Manduca sexta.
	Function:
	Transporter which plays an important role in sodium-mediated fluid transport in
	different organs. Prevents severe morphological changes of the cornea caused by
	increased sodium chloride concentrations in the stroma. In the inner ear, is involved in

transport of potassium through the fibrocyte layer to the stria vascularis and is essential for the generation of the endocochlear potential but not for regulation of potassium concentrations in the endolymph. In the kidney, is essential for urinary concentration, mediates a sodium flux into the thin descending limb of Henle loop to allow countercurrent multiplication by osmotic equilibration (By similarity). Involved in borate homeostasis. In the absence of borate, it functions as a Na(+) and OH(-)(H(+)) channel. In the presence of borate functions as an electrogenic Na(+) coupled borate cotransporter.

#### **Subunit:**

Homodimer.

#### **Subcellular Location:**

Cell membrane. Membrane; Multi-pass membrane protein.

## Tissue Specificity:

Widely expressed. Highly expressed in kidney, testis, salivary gland, thyroid, trachea and corneal endothelium. Not detected in retina and lymphocytes.

## Post-translational modifications:

Glycosylated.

#### **DISEASE:**

Corneal dystrophy and perceptive deafness (CDPD) [MIM:217400]: An ocular disease characterized by the association of corneal clouding with progressive perceptive hearing loss. Note=The disease is caused by mutations affecting the gene represented in this entry.

Corneal dystrophy, endothelial 2, autosomal recessive (CHED2) [MIM:217700]: A congenital corneal dystrophy characterized by thickening and opacification of the cornea, altered morphology of the endothelium, and secretion of an abnormal collagenous layer at the Descemet membrane. Note=The disease is caused by mutations affecting the gene represented in this entry.

Corneal dystrophy, Fuchs endothelial, 4 (FECD4) [MIM:613268]: A corneal disease caused by loss of endothelium of the central cornea. It is characterized by focal wart-like guttata that arise from Descemet membrane and develop in the central cornea, epithelial blisters, reduced vision and pain. Descemet membrane is thickened by abnormal collagenous deposition. Note=The disease is caused by mutations affecting the gene represented in this entry.

#### Similarity:

Belongs to the anion exchanger (TC 2.A.31) family.

#### **SWISS:**

O8NBS3

#### Gene ID:

83959

## **Database links:**

Entrez Gene: 83959Human

Entrez Gene: 532407Cow

Entrez Gene: 269356 Mouse

Entrez Gene: 311423Rat

Omim: 610206Human

SwissProt: Q8NBS3Human

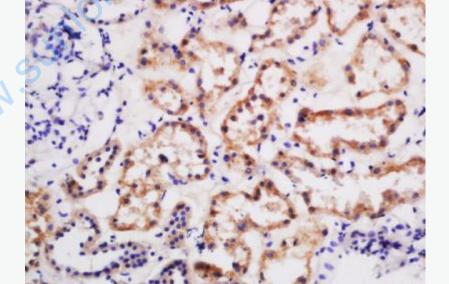
SwissProt: A2AJN7Mouse

Unigene: 105607Human

Unigene: 441391 Mouse

# **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Tissue/cell: human kidney tissue; 4% Paraformaldehyde-fixed and paraffin-

embedded;

Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-BTR1 Polyclonal Antibody, Unconjugated(SL13714R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining www.sunlondbiotech.cot