

BSND Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP9858b

Product Information

Application	WB, IHC-P, E
Primary Accession	Q8WZ55
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21397
Calculated MW	35197
Antigen Region	292-320

Additional Information

Gene ID	7809
Other Names	Barttin, BSND, BART
Target/Specificity	This BSND antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 292-320 amino acids from the C-terminal region of human BSND.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	BSND Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	BSND {ECO:0000303 PubMed:11687798, ECO:0000312 HGNC:HGNC:16512}
Function	Regulatory subunit of anion-selective CLCNKA:BSND and CLCNKB:BSND heteromeric channels involved in basolateral chloride conductance along the nephron to achieve urine concentration and maintain systemic acid-base homeostasis, and in the stria vascularis of the inner ear to establish the endocochlear potential necessary for normal hearing (PubMed: 11734858 ,

PubMed:[12111250](#), PubMed:[12574213](#), PubMed:[16849430](#), PubMed:[18776122](#), PubMed:[19646679](#), PubMed:[20538786](#), PubMed:[26013830](#)). Most likely acts as a chaperone that allosterically regulates proper sorting of CLCNKA:BSND and CLCNKB:BSND channels at the basolateral plasma membrane domain and functional switch to ion conducting state. Mediates constitutive opening of channel common gates (PubMed:[11734858](#), PubMed:[12111250](#), PubMed:[12574213](#), PubMed:[16849430](#), PubMed:[18776122](#), PubMed:[19646679](#), PubMed:[20538786](#), PubMed:[26013830](#)).

Cellular Location

Basolateral cell membrane; Multi-pass membrane protein. Note=Mostly sorted at the basolateral membrane. A significant amount also observed intracellularly. Staining in membranes of the renal tubule and of potassium-secreting epithelia of the inner ear is basolateral (By similarity).

Tissue Location

Expressed primarily in kidney. Expressed in specific nephron segments and in the stria vascularis of the inner ear

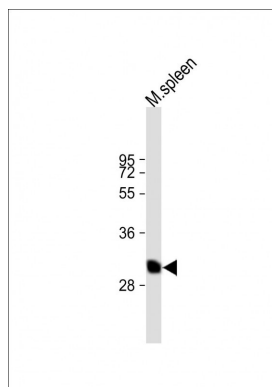
Background

BSND encodes an essential beta subunit for CLC chloride channels. These heteromeric channels localize to basolateral membranes of renal tubules and of potassium-secreting epithelia of the inner ear.

References

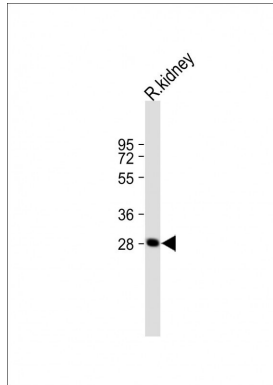
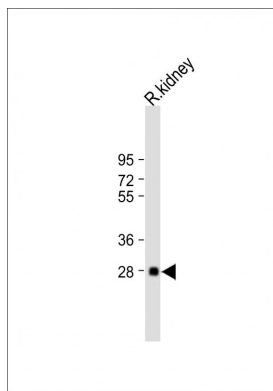
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 Kathiresan, S., et al. Nat. Genet. 41(3):334-341(2009)
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Images

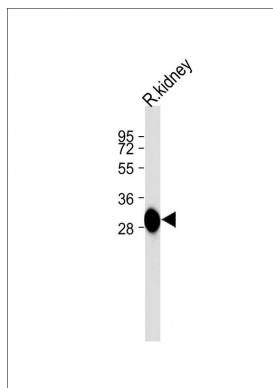


All lanes : Anti-BSND Antibody (C-term) at 1:1000 dilution
 Lane 1: mouse spleen lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Observed band size : 32 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

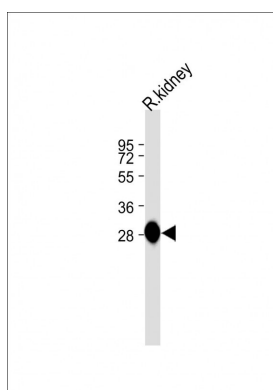
All lanes : Anti-BSND Antibody (C-term) at 1:2000 dilution
 Lane 1: rat kidney lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Observed band size : 28 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-BSND Antibody (C-term) at 1:1000 dilution
Lane 1: rat kidney lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 30 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

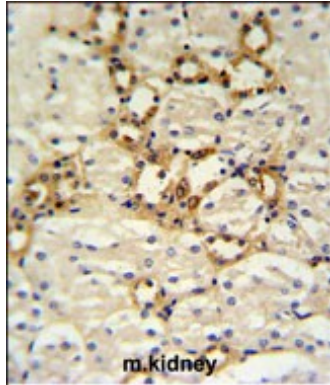
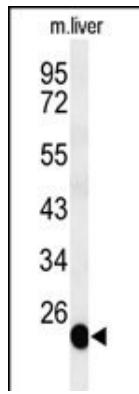


All lanes : Anti-BSND Antibody (C-term) at 1:1000 dilution
Lane1:rat kidney lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 34 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-BSND Antibody (C-term) at 1:1000 dilution
Lane1:rat kidney lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 34 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Western blot analysis of BSND Antibody (C-term) (Cat. #AP9858b) in mouse liver tissue lysates (35ug/lane). BSND (arrow) was detected using the purified Pab.



BSND Antibody (C-term) (Cat. #AP9858b) IHC analysis in formalin fixed and paraffin embedded mouse kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the BSND Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

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