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BSND Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9858b

Specification

BSND Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q8WZ55
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**292-320**

BSND Antibody (C-term) - 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~~1:50~100
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. 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.

BSND Antibody (C-term) - 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).

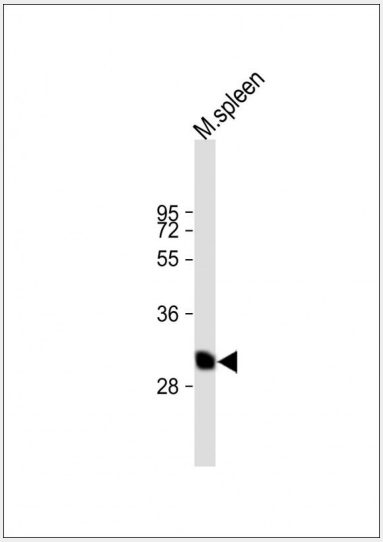
Tissue Location
Expressed primarily in kidney. Expressed in specific nephron segments and in the stria vascularis of the inner ear

BSND Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

BSND Antibody (C-term) - 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.

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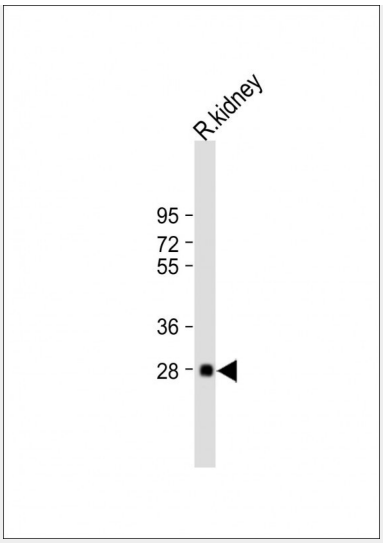
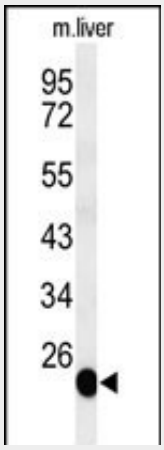
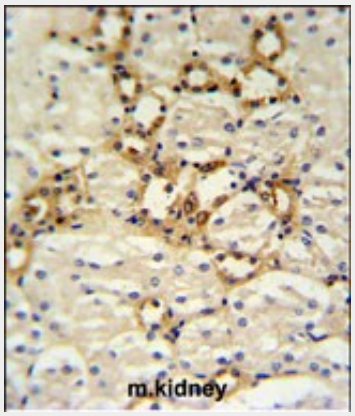


All lanes : Anti-BSND Antibody (C-term) at 1:2000 dilution Lane 1: rat kidney lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Observed band size : 28 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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.

BSND Antibody (C-term) - 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.

BSND Antibody (C-term) - References

Riazuddin, S., et al. Am. J. Hum. Genet. 85(2):273-280(2009)
Brochard, K., et al. Nephrol. Dial. Transplant. 24(5):1455-1464(2009)
Bircan, Z., et al. Pediatr. Nephrol. 24(4):841-844(2009)
Kathiresan, S., et al. Nat. Genet. 41(3):334-341(2009)
Kathiresan, S., et al. Nat. Genet. 41(1):56-65(2009)