Datasheet for ABIN3043930

anti-Band 3/AE1 antibody (AA 28-365)

5 Images

Go to Product page

Overview

Quantity:	100 µg
Target:	Band 3/AE1 (SLC4A1)
Binding Specificity:	AA 28-365
Reactivity:	Human, Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Band 3/AE1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Purpose:	Rabbit IgG polyclonal antibody for Band 3 anion transport protein(SLC4A1) detection. Tested with WB, IHC-P, IHC-F in Human,Mouse,Rat.
Immunogen:	E. coli-derived human Band 3 (Position: E28-N365). Human Band 3 shares 75.7% and 74.5% amino acid (aa) sequence identity with mouse and rat Band 3, respectively.
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Band 3 anion transport protein(SLC4A1) detection. Tested with WB, IHC-P, IHC-F in Human,Mouse,Rat. Gene Name: solute carrier family 4 (anion exchanger), member 1 (Diego blood group) Protein Name: Band 3 anion transport protein

Product Details

Purification:	Immunogen affinity purified.

Target Details

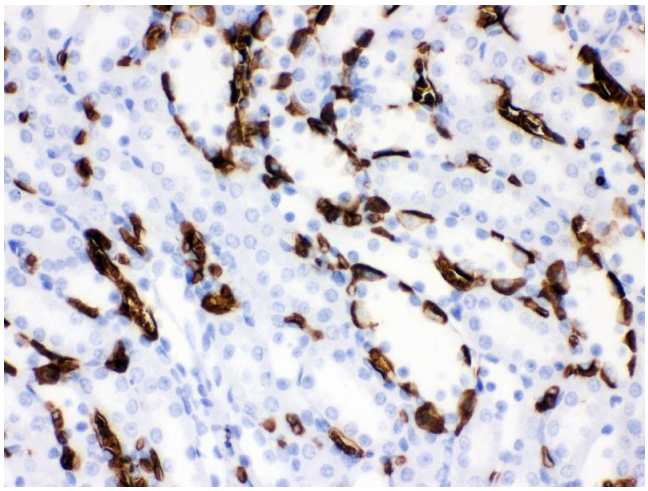
Target:	Band 3/AE1 (SLC4A1)
Alternative Name:	SLC4A1 (SLC4A1 Products)
Background:	Band 3 is also known as SLC4A1. The protein encoded by this gene is part of the anion exchanger (AE) family and is expressed in the erythrocyte plasma membrane, where it functions as a chloride/bicarbonate exchanger involved in carbon dioxide transport from tissues to lungs. The protein comprises two domains that are structurally and functionally distinct. The N-terminal 40 kDa domain is located in the cytoplasm and acts as an attachment site for the red cell skeleton by binding ankyrin. The glycosylated C-terminal membrane-associated domain contains 12-14 membrane spanning segments and carries out the stilbene disulphonate-sensitive exchange transport of anions. The cytoplasmic tail at the extreme C-terminus of the membrane domain binds carbonic anhydrase II. The encoded protein associates with the red cell membrane protein glycophorin A and this association promotes the correct folding and translocation of the exchanger. This protein is predominantly dimeric but forms tetramers in the presence of ankyrin. Many mutations in this gene are known in man, and these mutations can lead to two types of disease: destabilization of red cell membrane leading to hereditary spherocytosis, and defective kidney acid secretion leading to distal renal tubular acidosis. Other mutations that do not give rise to disease result in novel blood group antigens, which form the Diego blood group system. Synonyms: AE 1 antibody|AE1 antibody|Anion exchange protein 1 antibody|Anion exchanger 1 antibody| B3AT_HUMAN antibody|Band 3 anion transport protein antibody|BND3 antibody|CD233 antibody|DI antibody|Diego blood group antibody|EMPB3 antibody|EPB3 antibody|Erythrocyte membrane protein band 3 antibody|Erythroid anion exchange protein antibody|FR antibody|Froese blood group antibody|RTA1A antibody|SLC4A1 antibody|Solute carrier family 4 anion exchanger member 1 antibody|Solute carrier family 4 member 1 antibody|SW antibody|Swann blood group antibody|Waldner blood group antibody|WD antibody|WD1 antibody|WR antibody|Wright blood group antibody
Gene ID:	6521
UniProt:	P02730

Application Details

Application Notes:	WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, Rat IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Mouse, Rat, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections. IHC-F: Concentration: 0.5-1 µg/mL, Tested Species: Human Notes: Tested Species: Species with positive results. Other applications have not been tested. Optimal dilutions should be determined by end users.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P) and IHC(F).
Restrictions:	For Research Use only

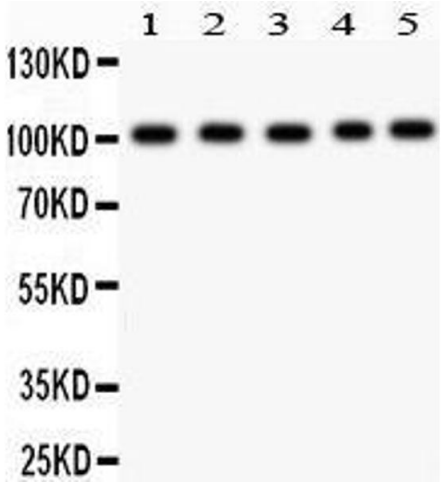
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.



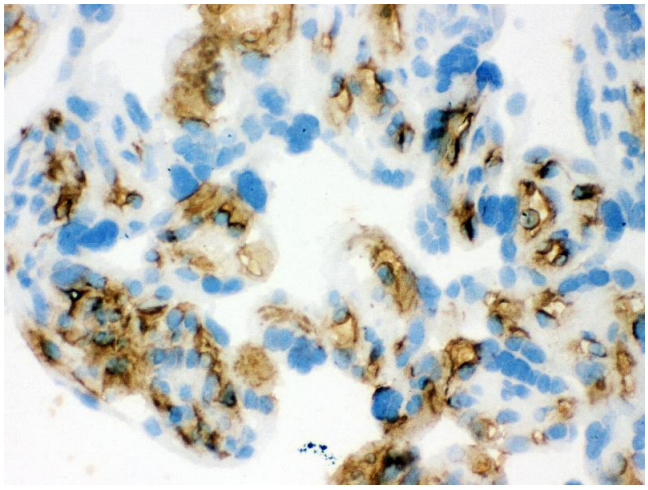
Immunohistochemistry

Image 1. Anti- Band 3 Picoband antibody,IHC(P) IHC(P): Rat Kidney Tissue



Western Blotting

Image 2. Anti- Band 3 Picoband antibody, Western blotting All lanes: Anti Band 3 at 0.5ug/ml Lane 1: Rat Brain Tissue Lysate at 50ug Lane 2: Rat Kidney Tissue Lysate at 50ug Lane 3: Rat Liver Tissue Lysate at 50ug Lane 4: Rat Spleen Tissue Lysate at 50ug Lane 5: Human Placenta Tissue Lysate at 50ug Predicted bind size: 102KD Observed bind size: 102KD



Immunohistochemistry

Image 3. Anti- Band 3 Picoband antibody,IHC(F) IHC(F): Human Placenta Tissue

Please check the product details page for more images. Overall 5 images are available for ABIN3043930.