abcam

Product datasheet

Anti-Band 3/AE 1 antibody ab78067

1 References 2 Images

Overview

Product name Anti-Band 3/AE 1 antibody

Description Rabbit polyclonal to Band 3/AE 1

Host species Rabbit

Tested applications Suitable for: WB, IHC-P

Species reactivity Reacts with: Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control Human placenta tissue

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer Preservative: 0.01% Sodium azide

Constituents: 50% Glycerol, 49% PBS

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab78067 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 90 kDa (predicted molecular weight: 102 kDa).
IHC-P		Use a concentration of 10 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function

Functions both as a transporter that mediates electroneutral anion exchange across the cell

membrane and as a structural protein. Major integral membrane glycoprotein of the erythrocyte

membrane; required for normal flexibility and stability of the erythrocyte membrane and for normal

erythrocyte shape via the interactions of its cytoplasmic domain with cytoskeletal proteins, glycolytic enzymes, and hemoglobin. Functions as a transporter that mediates the 1:1 exchange of

inorganic anions across the erythrocyte membrane. Mediates chloride-bicarbonate exchange in the kidney, and is required for normal acidification of the urine.

Tissue specificity Detected in erythrocytes (at protein level) (PubMed:7506871, PubMed:26542571). Isoform 2 is

expressed in kidney (at protein level) (PubMed:7506871).

Involvement in disease Ovalocytosis, Southeast Asian

Spherocytosis 4

Renal tubular acidosis, distal, autosomal dominant Renal tubular acidosis, distal, with hemolytic anemia

Renal tubular acidosis, distal, with normal red cell morphology

Cryohydrocytosis

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

Post-translational modifications

Phosphorylated on Tyr-8 and Tyr-21 most likely by SYK. PP1-resistant phosphorylation that

precedes Tyr-359 and Tyr-904 phosphorylation.

Phosphorylated on Tyr-359 and Tyr-904 most likely by LYN. PP1-inhibited phosphorylation that

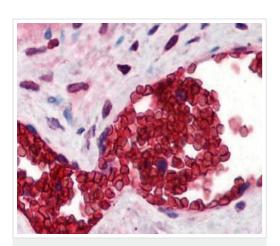
follows Tyr-8 and Tyr-21 phosphorylation.

N-glycosylated.

Cell membrane. Basolateral cell membrane. Detected in the erythrocyte cell membrane and on

the basolateral membrane of alpha-intercalated cells in the collecting duct in the kidney.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Band 3/AE 1 antibody (ab78067)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human placenta tissue, staining Band 3/AE 1 with ab78067 at 10 $\mu g/ml$.



Western blot - Anti-Band 3/AE 1 antibody (ab78067)

All lanes: Anti-Band 3/AE 1 antibody (ab78067) at 1 µg/ml

Lane 1 : Liver (Human) Tissue Lysate - fetal normal tissue (ab29890)

Lane 2: Human kidney tissue lysate - total protein (ab30203)

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 102 kDa **Observed band size:** 90 kDa

Additional bands at: 60 kDa. We are unsure as to the identity of

these extra bands.

Exposure time: 12 minutes

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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