



## Product datasheet

### Anti-Band 3/AE 1 antibody ab172129

[1 Image](#)

#### Overview

<b>Product name</b>	Anti-Band 3/AE 1 antibody
<b>Description</b>	Mouse polyclonal to Band 3/AE 1
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant full length protein within Human Band 3/AE 1 aa 1 to the C-terminus. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please <b><u>contact</u></b> our Scientific Support team to discuss your requirements. AAH99628.1 Database link: <b><u>P02730</u></b>
	 <b><u>Run BLAST with</u></b>  <b><u>Run BLAST with</u></b>
<b>Positive control</b>	Band 3/AE 1 transfected 293T cell line lysate
<b>General notes</b>	<p>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.</p> <p>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&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.4 Constituent: 100% PBS
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab172129 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. Predicted molecular weight: 101 kDa.

## 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.

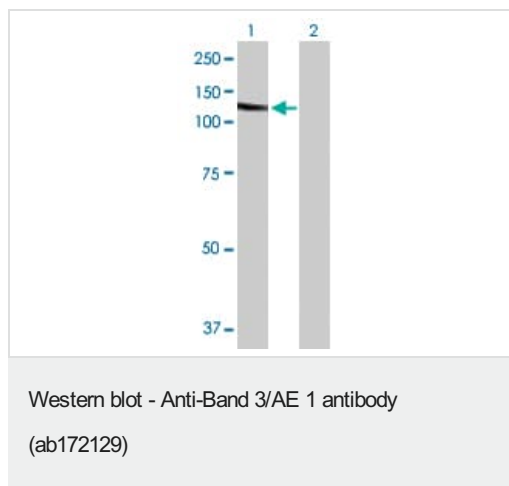
### Post-translational modifications

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.

### Cellular localization

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



**All lanes :** Anti-Band 3/AE 1 antibody (ab172129) at 1 µg/ml

**Lane 1 :** Band 3/AE 1 transfected 293T cell line lysate

**Lane 2 :** Non-transfected 293T cell line lysate

Lysates/proteins at 15 µl per lane.

#### Secondary

**All lanes :** Goat Anti-Mouse IgG at 1/2500 dilution

**Predicted band size:** 101 kDa

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

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- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
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