

Product datasheet

Anti-Band 3/AE 1 antibody [EPR1425(2)] ab175214

Recombinant RabMAb

4 Images

Overview

Product name	Anti-Band 3/AE 1 antibody [EPR1425(2)]
Description	Rabbit monoclonal [EPR1425(2)] to Band 3/AE 1
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P Unsuitable for: ICC/IF or IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Human red blood cell lysate; Human lung and spleen tissue.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal

Clone number	EPR1425(2)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab175214 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		1/100000 - 1/500000. Predicted molecular weight: 100 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Application notes Is unsuitable for ICC/IF or IP.

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).

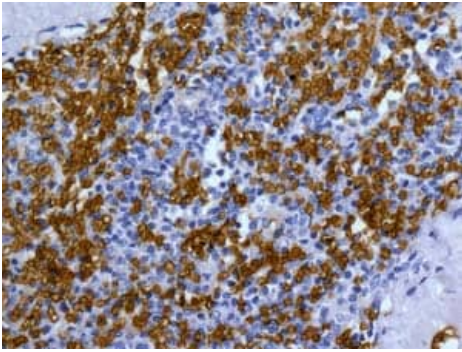
Involvement in disease Ovalocytosis, Southeast Asian
Spherocytosis 4
Renal tubular acidosis, distal, autosomal dominant
Renal tubular acidosis, distal, with hemolytic anemia
Renal tubular acidosis, distal, with normal red cell morphology
Cryohydrocytosis

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.

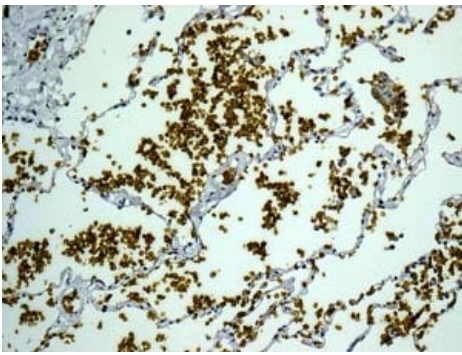
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Band 3/AE 1 antibody [EPR1425(2)] (ab175214)

Immunohistochemical analysis of paraffin-embedded Human spleen tissue labeling Band 3/AE 1 at 1/250 dilution. Note erythrocyte staining.

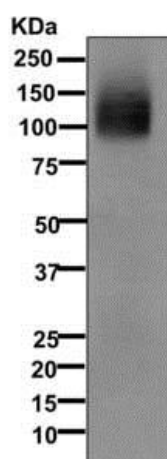
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Band 3/AE 1 antibody [EPR1425(2)] (ab175214)

Immunohistochemical analysis of paraffin-embedded Human lung tissue labeling Band 3/AE 1 with ab175214 at 1/250 dilution. Note erythrocyte staining.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-Band 3/AE 1 antibody [EPR1425(2)] (ab175214)

Anti-Band 3/AE 1 antibody [EPR1425(2)] (ab175214) at 1/100000 dilution + Human red blood cell lysate at 10 µg

Predicted band size: 100 kDa

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Band 3/AE 1 antibody [EPR1425(2)] (ab175214)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- 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
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors