

## Product datasheet

# Anti-Band 3/AE 1 (phospho Y21) antibody [EPR1424] ab125070

Recombinant RabMAb

3 Images

### Overview

Product name	Anti-Band 3/AE 1 (phospho Y21) antibody [EPR1424]
Description	Rabbit monoclonal [EPR1424] to Band 3/AE 1 (phospho Y21)
Host species	Rabbit
Tested applications	<b>Suitable for:</b> WB <b>Unsuitable for:</b> ICC/IF or IHC-P
Species reactivity	<b>Reacts with:</b> Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Human red blood cell lysates, Pervanadate treated.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</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 -20°C. Stable for 12 months at -20°C.
Storage buffer	<p>pH: 7.20</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS</p>
Purity	Protein A purified
Clonality	Monoclonal

Clone number	EPR1424
Isotype	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab125070 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

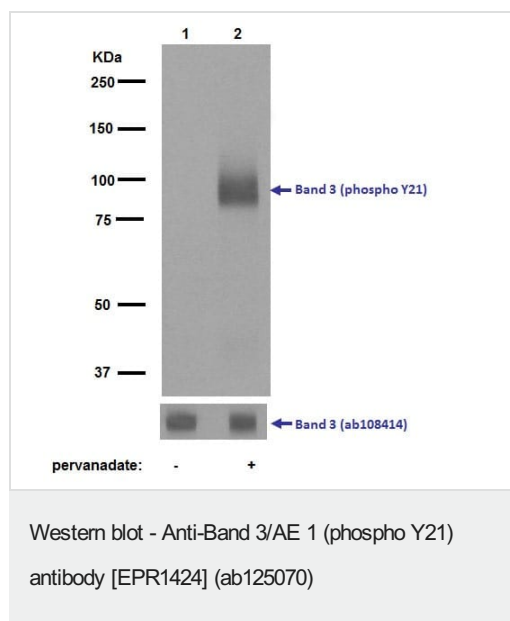
Application	Abreviews	Notes
WB		1/10000 - 1/50000. Detects a band of approximately 101 kDa (predicted molecular weight: 101 kDa).

**Application notes** Is unsuitable for ICC/IF or IHC-P.

## Target

<b>Function</b>	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.
<b>Tissue specificity</b>	Detected in erythrocytes (at protein level) (PubMed:7506871, PubMed:26542571). Isoform 2 is expressed in kidney (at protein level) (PubMed:7506871).
<b>Involvement in disease</b>	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
<b>Sequence similarities</b>	Belongs to the anion exchanger (TC 2.A.31) family.
<b>Post-translational modifications</b>	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.
<b>Cellular localization</b>	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 (phospho Y21) antibody [EPR1424] (ab125070) at 1/50000 dilution (purified)

**Lane 1 :** Untreated RBC

**Lane 2 :** RBC treated with pervanadate

Lysates/proteins at 10 µg per lane.

### Secondary

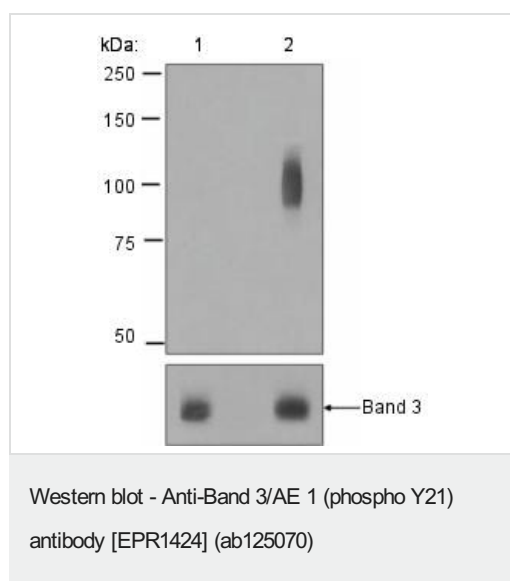
**All lanes :** HRP goat anti-rabbit (H+L) at 1/1000 dilution

**Predicted band size:** 101 kDa

**Observed band size:** 101 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



**All lanes :** Anti-Band 3/AE 1 (phospho Y21) antibody [EPR1424] (ab125070) at 1/50000 dilution (unpurified)

**Lane 1 :** Human red blood cell lysate, untreated

**Lane 2 :** Human red blood cell lysate, Pervanadate treated

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** Goat anti-Rabbit HRP at 1/2000 dilution

Developed using the ECL technique.

**Predicted band size:** 101 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 (phospho Y21) antibody  
[EPR1424] (ab125070)

**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