# abcam

### Product datasheet

# Recombinant Human Band 3/AE 1 protein (Tagged) ab235968

## 1 Image

#### **Description**

Product name Recombinant Human Band 3/AE 1 protein (Tagged)

Purity > 90 % SDS-PAGE.

Expression system Escherichia coli

Accession P02730

Protein length Protein fragment

Animal free No

Nature Recombinant

**Species** Human

**Sequence** MEELQDDYEDMMEENLEQEEYEDPDIPESQMEEPAAHD

**TEATATDYHTTS** 

HPGTHKVYVELQELVMDEKNQELRWMEAARWVQLEENL

**GENGAWGRPHLS** 

HLTFWSLLELRRVFTKGTVLLDLQETSLAGVANQLLDRFIF

**EDQIRPQDR** 

EELLRALLLKHSHAGELEALGGVKPAVLTRSGDPSQPLLP

**QHSSLETQLF** 

CEQGDGGTEGHSPSGILEKIPPDSEATLVLVGRADFLEQP

VLGFVRLQEA

AELEAVELPVPIRFLFVLLGPEAPHIDYTQLGRAAATLMSE

**RVFRIDAYM** 

AQSRGELLHSLEGFLDCSLVLPPTDAPSEQALLSLVPVQ

RELLRRRYQSS

PAKPDSSFYKGLDLNGGPDDPLQQTGQLFGGLVRDIRRR

YPYYLSDITDA FSP

Predicted molecular weight 65 kDa including tags

Amino acids 1 to 403

Tags His tag N-Terminus

Additional sequence information Cytoplasmic domain. N-terminal 10xHis-SUMO-tag and C-terminal Myc-tag.

**Specifications** 

Our Abpromise guarantee covers the use of ab235968 in the following tested applications.

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

Applications SDS-PAGE

Form Liquid

**Additional notes** Previously labelled as Band 3.

#### **Preparation and Storage**

**Stability and Storage** Shipped at 4°C. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 7.2

Constituents: Tris buffer, 50% Glycerol (glycerin, glycerine)

#### **General Info**

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

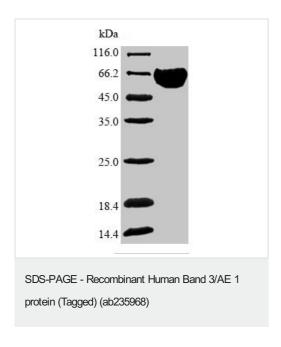
follows Tyr-8 and Tyr-21 phosphorylation.

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**



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) analysis with 5% enrichment gel and 15% separation gel of ab235968.

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