

For Research Use Only

# Band 3/AE 1 Recombinant antibody

Catalog Number: 81066-1-RR



## Basic Information

### Catalog Number:

81066-1-RR

### Size:

100ul, Concentration: 800 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG27878

### GenBank Accession Number:

BC101570

### GeneID (NCBI):

6521

### UNIPROT ID:

P02730

### Full Name:

solute carrier family 4, anion exchanger, member 1 (erythrocyte membrane protein band 3, Diego blood group)

### Calculated MW:

911 aa, 102 kDa

### Purification Method:

Protein A purification

### CloneNo.:

3K21

### Recommended Dilutions:

IHC 1:1000-1:4000

IF-P 1:800-1:3200

## Applications

### Tested Applications:

IHC, IF-P, ELISA

### Species Specificity:

human

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

IHC : human placenta tissue,

IF-P : human placenta tissue,

## Background Information

Anion exchanger 1 (AE1), also known as band 3, is a 95-100 kDa transmembrane glycoprotein which is abundantly expressed in erythrocyte plasma membrane and mediates the electroneutral exchange of Cl<sup>-</sup> and HCO<sub>3</sub><sup>-</sup>. It contains a 52-55 kDa C-terminal membrane crossing domain and a 43 kDa N-terminal cytoplasmic domain. Degradation of band 3 protein occurred during erythrocyte aging. The oxidative stress can also activate the proteolysis of band 3 through caspases.

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

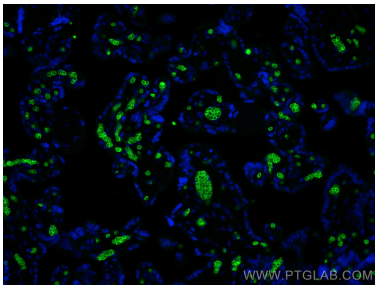
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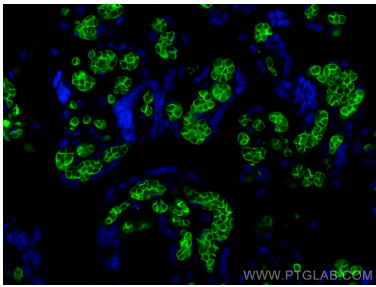
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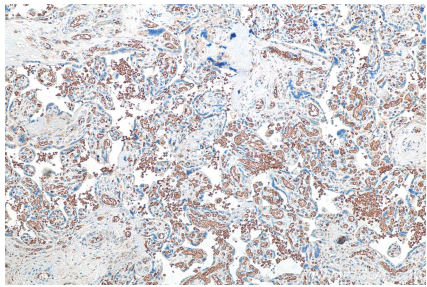
Selected Validation Data



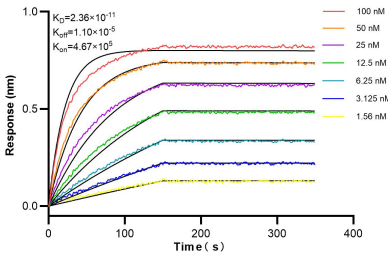
Immunofluorescent analysis of (4% PFA) fixed human placenta tissue using Band 3/ AE1 antibody (81066-1-RR, Clone: 3K21 ) at dilution of 1:1600 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 81066-1-RR (SLC 4A1 antibody) at dilution of 1:1700 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 81066-1-RR against Human Band 3/AE 1 were performed. The affinity constant is 23.6 pM.