

For Research Use Only

# Band 3/AE 1 Polyclonal antibody

Catalog Number: 28131-1-AP **5 Publications**



## Basic Information

<b>Catalog Number:</b> 28131-1-AP	<b>GenBank Accession Number:</b> BC101570	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 350 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 6521	<b>Recommended Dilutions:</b> WB 1:200-1:1000 IHC 1:50-1:500 IF-P 1:50-1:500
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P02730	
<b>Isotype:</b> IgG	<b>Full Name:</b> solute carrier family 4, anion exchanger, member 1 (erythrocyte membrane protein band 3, Diego blood group)	
<b>Immunogen Catalog Number:</b> AG27878	<b>Calculated MW:</b> 911 aa, 102 kDa	
	<b>Observed MW:</b> 95-100 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF-P, ELISA	<b>Positive Controls:</b> WB: COLO 320 cells, mouse liver tissue
<b>Cited Applications:</b> WB, IP, IF	<b>IHC:</b> human spleen tissue, human stomach cancer tissue
<b>Species Specificity:</b> human, mouse	<b>IF-P:</b> human placenta tissue,
<b>Cited Species:</b> human, mouse	

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

## 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.

## Notable Publications

Author	Pubmed ID	Journal	Application
Eunus S Ali	35772404	Mol Cell	WB
Akihito Kitao	31997080	Int J Hematol	IP
George Vaisey	36515266	eLife	IF

## Storage

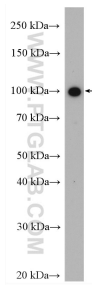
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

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

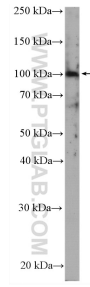
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

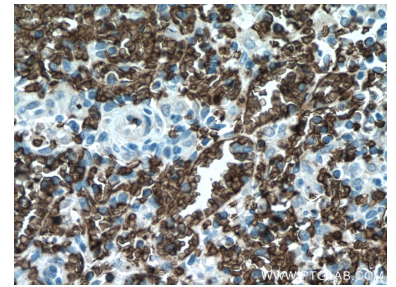
## Selected Validation Data



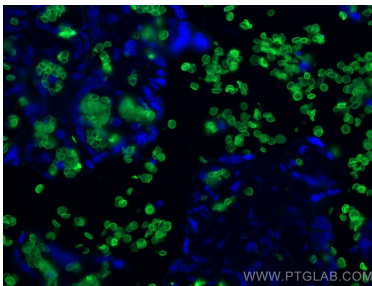
COLO 320 cells were subjected to SDS PAGE followed by western blot with 28131-1-AP (band 3/ AE1 antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



mouse liver tissue were subjected to SDS PAGE followed by western blot with 28131-1-AP (band 3/ AE1 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human spleen tissue slide using 28131-1-AP (SLC4A1 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human placenta tissue using band 3/ AE1 antibody (28131-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).