

For Research Use Only

Band 3/ AE1 Polyclonal antibody

Catalog Number: 28131-1-AP

4 Publications



Basic Information

Catalog Number: 28131-1-AP	GenBank Accession Number: BC101570	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 350 µg/ml by Nanodrop and 233 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 6521	Recommended Dilutions: WB 1:200-1:1000 IHC 1:50-1:500 IF 1:50-1:500
Source: Rabbit	Full Name: solute carrier family 4, anion exchanger, member 1 (erythrocyte membrane protein band 3, Diego blood group)	
Isotype: IgG	Calculated MW: 911 aa, 102 kDa	
Immunogen Catalog Number: AG27878	Observed MW: 95-100 kDa	

Applications

Tested Applications: IF, IHC, WB, ELISA	Positive Controls: WB : COLO 320 cells, mouse liver tissue IHC : human spleen tissue, human stomach cancer tissue IF : human placenta tissue,
Cited Applications: IF, IP, WB	
Species Specificity: Human, Mouse	
Cited Species: 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⁻ and HCO₃⁻. 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

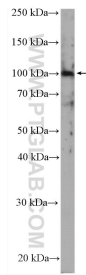
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

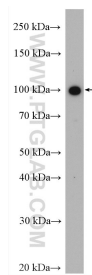
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

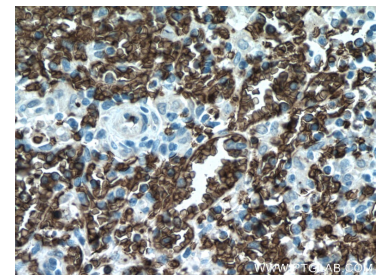
Selected Validation Data



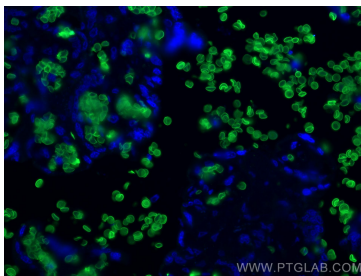
mouse liver tissue were subjected to SDS PAGE followed by western blot with 28131-1-AP (band 3/ AE1 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



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.



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).