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Rabbit Anti-phospho-Band3 (Tyr21) antibody

SL12569R

Product Name:	phospho-Band3 (Tyr21)
Chinese Name:	磷酸化红细胞阴离子Exchange protein1抗体
Alias:	Band 3 (phospho Y21); p-Band 3 (phospho Y21); Solute carrier family 4 anion exchanger member 1; Solute carrier family 4 member 1; AE 1; AE1; Anion exchange protein 1; Anion exchanger 1; B3AT_HUMAN; Band 3; Band 3 anion transport protein; BND3; CD233; DI; Diego blood group; EMPB3; EPB3; Erythrocyte membrane protein band 3; Erythroid anion exchange protein; FR antibod; Froese blood group; RTA1A; SLC4A1; Solute carrier family 4 member 1; SW antibody; Swann blood group; Waldner blood group; WD antibody; WD1; WR antibody; Wright blood group.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Dog,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	102kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human Band3 around the phosphorylation site of Tyr21:EE(p-Y)ED
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of

	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Band 3, also designated AE1, is an erythrocyte membrane glycoprotein that contributes to cell stuctural integrity and mediates exchange of chloride and bicarbonate across the phospholipid bilayer. The diverse functions of the approximately 900 amino acid protein are mediated by two distinct domains. The amino terminal domain, also known as cdb3 for cytoplasmic domain of erthrocyte membrane band 3, acts as an attachment site for the erythrocyte skeleton by binding ankyrin. The carboxy-terminal, membrane-associated domain carries out exchange transport of anions. Degradation of band 3 can generate an aging antigen known as senescent cell antigen, or SCA, which is expressed on old cells and marks them for removal by the immune system. An isoform of band 3, which lacks the first 65 amino acids and does not bind ankryin, is expressed in kidney. **Function:** Band 3 is the major integral glycoprotein of the erythrocyte membrane. Band 3 has two functional domains. Its integral domain mediates a 1:1 exchange of inorganic anions across the membrane, whereas its cytoplasmic domain provides binding sites for cytoskeletal proteins, glycolytic enzymes, and hemoglobin. **Subcellular Location:** Membrane. **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. **DISEASE:** Defects in SLC4A1 are the cause of elliptocytosis type 4 (EL4) [MIM:109270]. EL4 is a Rhesus-unlinked form of hereditary elliptocytosis, a genetically heterogeneous, autosomal dominant hematologic disorder. It is characterized by variable hemolytic anemia and elliptical or oval red cell shape. Defects in SLC4A1 are the cause of spherocytosis type 4 (SPH4) [MIM:612653]; also known as hereditary spherocytosis type 4 (HS4). Spherocytosis is a hematologic disorder leading to chronic hemolytic anemia and characterized by numerous abnormally shaped erythrocytes which are generally spheroidal. Defects in SLC4A1 are the cause of autosomal dominant distal renal tubular acidosis (AD-dRTA) [MIM:179800]. This disease is characterized by reduced ability to acidify urine, variable hyperchloremic hypokalemic metabolic acidosis, nephrocalcinosis, and nephrolithiasis. Defects in SLC4A1 are the cause of autosomal recessive distal renal tubular acidosis (AR-dRTA) [MIM:611590]. **Similarity:** Belongs to the anion exchanger (TC 2.A.31) family.

	SWISS: P02730 **Gene ID:** 6521 **Database links:** Entrez Gene: 6521Human Omim: 109270Human SwissProt: P02730Human Unigene: 443948Human **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.