

Datasheet for ABIN2713525

**Band 3/AE1 Protein (Myc-DYKDDDDK Tag)****1** Image[Go to Product page](#)

## Overview

Quantity:	20 µg
Target:	Band 3/AE1 (SLC4A1)
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Band 3/AE1 protein is labelled with Myc-DYKDDDDK Tag.
Application:	Antibody Production (AbP), Standard (STD)

## Product Details

Characteristics:	<ul style="list-style-type: none"><li>• Recombinant human CD233 / SLC4A1 protein expressed in HEK293 cells.</li><li>• Produced with end-sequenced ORF clone</li></ul>
Purity:	> 80 % as determined by SDS-PAGE and Coomassie blue staining

## Target Details

Target:	Band 3/AE1 (SLC4A1)
Alternative Name:	Cd233,slc4a1 ( <a href="#">SLC4A1 Products</a> )
Background:	The protein encoded by this gene is part of the anion exchanger (AE) family and is expressed in the erythrocyte plasma membrane, where it functions as a chloride/bicarbonate exchanger involved in carbon dioxide transport from tissues to lungs. The protein comprises two domains that are structurally and functionally distinct. The N-terminal 40 kDa domain is located in the cytoplasm and acts as an attachment site for the red cell skeleton by binding ankyrin. The

## Target Details

glycosylated C-terminal membrane-associated domain contains 12-14 membrane spanning segments and carries out the stilbene disulphonate-sensitive exchange transport of anions. The cytoplasmic tail at the extreme C-terminus of the membrane domain binds carbonic anhydrase II. The encoded protein associates with the red cell membrane protein glycophorin A and this association promotes the correct folding and translocation of the exchanger. This protein is predominantly dimeric but forms tetramers in the presence of ankyrin. Many mutations in this gene are known in man, and these mutations can lead to two types of disease: destabilization of red cell membrane leading to hereditary spherocytosis, and defective kidney acid secretion leading to distal renal tubular acidosis. Other mutations that do not give rise to disease result in novel blood group antigens, which form the Diego blood group system. Southeast Asian ovalocytosis (SAO, Melanesian ovalocytosis) results from the heterozygous presence of a deletion in the encoded protein and is common in areas where *Plasmodium falciparum* malaria is endemic. One null mutation in this gene is known, resulting in very severe anemia and nephrocalcinosis.

Molecular Weight:	101.6 kDa
NCBI Accession:	<a href="#">NP_000333</a>

## Application Details

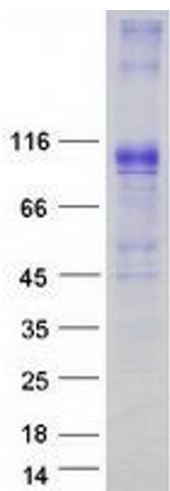
Application Notes:	Recombinant human proteins can be used for: Native antigens for optimized antibody production Positive controls in ELISA and other antibody assays
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Comment:	The tag is located at the C-terminal.
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Restrictions:	For Research Use only
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## Handling

Concentration:	50 µg/mL
Buffer:	25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10 % glycerol.
Storage:	-80 °C
Storage Comment:	Store at -80°C. Thaw on ice, aliquot to individual single-use tubes, and then re-freeze immediately. Only 2-3 freeze thaw cycles are recommended.



Western Blotting

**Image 1.** Validation with Western Blot