

DESCRIPTION

Target:	SLC4A1
Target aliases:	RTA1A, CD233, EPB3, AE1, FR, SW, WR, DI, WD, EMPB3, BND3, SPH4, AE 1, CHC, SAO, WD1
Fc isotype:	IgG2a
Membrane proteome specificity:	Monospecific for 6,000 membrane proteins tested
Species reactivity:	Human (Others untested)
Extracellular epitope:	Unknown
Fc modifications:	C-terminal Avitag ¹ , disabled Fc- γ receptor binding ²
Source:	Recombinant CHO expression; purified by Protein A chromatography
Formulation:	Endotoxin Free PBS pH 7.4, sterile-filtered
Concentration:	1 mg/ml

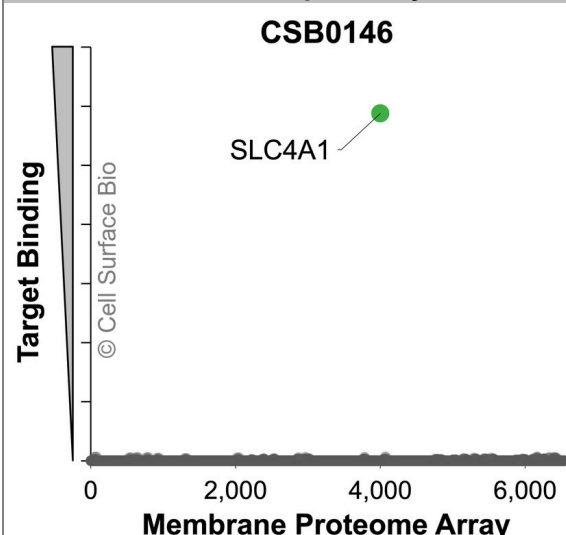
1. A peptide tag that can be biotinylated in vitro using the biotin ligase enzyme (BirA).
2. Mutated Fc- γ receptor binding site to minimize non-specific antibody binding.

SLC4A1 TARGET INFORMATION

SLC4A1 is a multi-pass transmembrane protein and anion exchanger, specifically a chloride/bicarbonate exchanger. SLC4A1 is an important component of red blood cell membranes and is involved in transporting carbon dioxide to the lungs from other tissues. SLC4A1 is also involved in acidification of urine in the kidneys. Mutations in SLC4A1 can cause hereditary spherocytosis, distal renal tubular acidosis, Southeast Asian ovalocytosis, and very severe anemia and nephrocalcinosis (caused by a null mutation). Some mutations in SLC4A1 do not cause disease and instead produce novel blood group antigens belonging to the Diego blood group. (NCBI Gene: 6521, UniProtKB/Swiss-Prot: P02730) Other names: RTA1A, CD233, EPB3, AE1, FR, SW, WR, DI, WD, EMPB3, BND3, SPH4, AE 1, CHC, SAO, WD1

SHIPPING AND STORAGE

Shipping:	Shipped at ambient temperature. Store at 4°C.
Stability & Storage:	Stable for 12 months from date of receipt when stored at 4°C. Avoid repeated freeze-thaw cycles.

VALIDATION DATA
Membrane Proteome Specificity


The specificity of SLC4A1 Monoclonal Antibody (CSB0146) was tested on the Membrane Proteome Array™ and shown to be specific for SLC4A1.

The Membrane Proteome Array™ contains 6,000 different human membrane proteins, each expressed in unfixed human cells to ensure native conformation and post-translational modifications. The Membrane Proteome Array™ represents the industry standard for determining the binding specificity of antibodies and other protein ligands.

Applications	Conditions	Recommended concentration
Immunofluorescence, Intracellular	Fixed 4% paraformaldehyde, Permeabilized 0.1% Triton X-100	1 µg/ml
mAb + target mAb + control Control mAb + target © Cell Surface Bio (Left) JS-1 cells transiently transfected SLC4A1 were permeabilized and stained with SLC4A1 Monoclonal Antibody (CSB0146) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) JS-1 cells transiently transfected with an empty control vector stained with SLC4A1 Monoclonal Antibody. (Bottom right) Isotype control: JS-1 cells transfected with {{target}} and stained with control MAb.		