

DESCRIPTION

Target:	SLC14A1
Target aliases:	HUT11, HUT11A, HsT1341, JK, JK(a), JK(b), RACH1, RACH2, UT-B1, UT1, UTE
Fc isotype:	Mouse IgG2a
Membrane proteome specificity:	Monospecific for 6,000 membrane proteins tested
Species reactivity:	Human, Mouse, Cow (+/-)
Extracellular epitope:	Yes
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

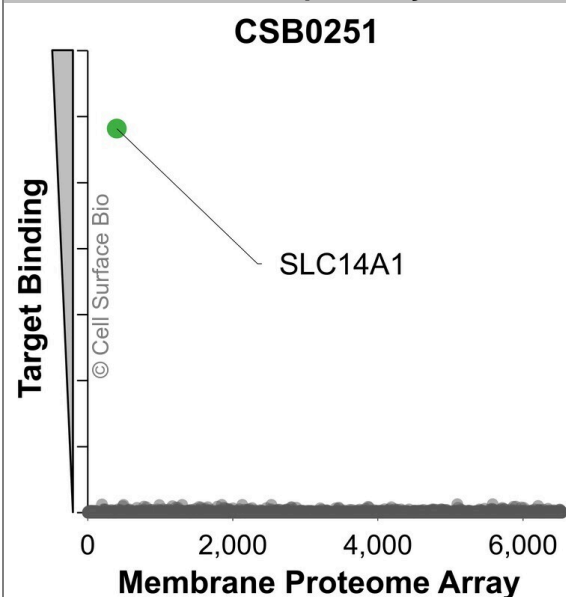
1. A peptide tag that can be biotinylated in vitro using the biotin ligase enzyme (BirA).
2. Mutated Fc-γ receptor binding site to minimize non-specific antibody binding.

SLC14A1 TARGET INFORMATION

Solute carrier family 14 member 1 (SLC14A1) is a urea transporter integral to the renal and erythrocyte plasma membranes, playing a critical role in the urinary concentration mechanism and urea recycling. This protein is primarily expressed in the kidney and red blood cells, making it significant for studies related to renal physiology and blood group antigen systems. SLC14A1's role in renal function and erythrocyte physiology makes it a valuable target for research in nephrology and hematology. (NCBI Gene: 6563, UniProtKB/Swiss-Prot: Q13336) Other names: HUT11, HUT11A, HsT1341, JK, JK(a), JK(b), RACH1, RACH2, UT-B1, UT1, UTE

SHIPPING AND STORAGE

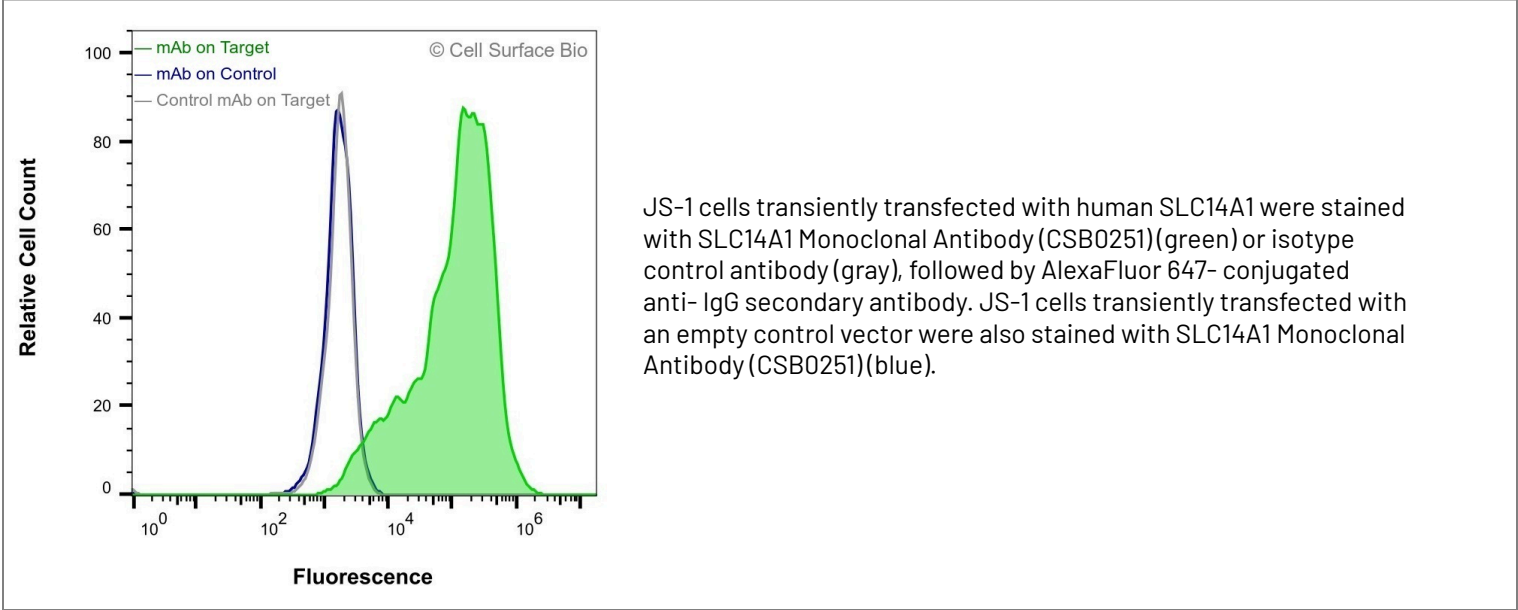
Shipping:	Shipped at ambient temperature. Store at 4°C.
Stability & Storage:	Stable for 12 months from date of receipt when stored at 4°C. Avoid repeated freeze-thaw cycles.

VALIDATION DATA
Membrane Proteome Specificity


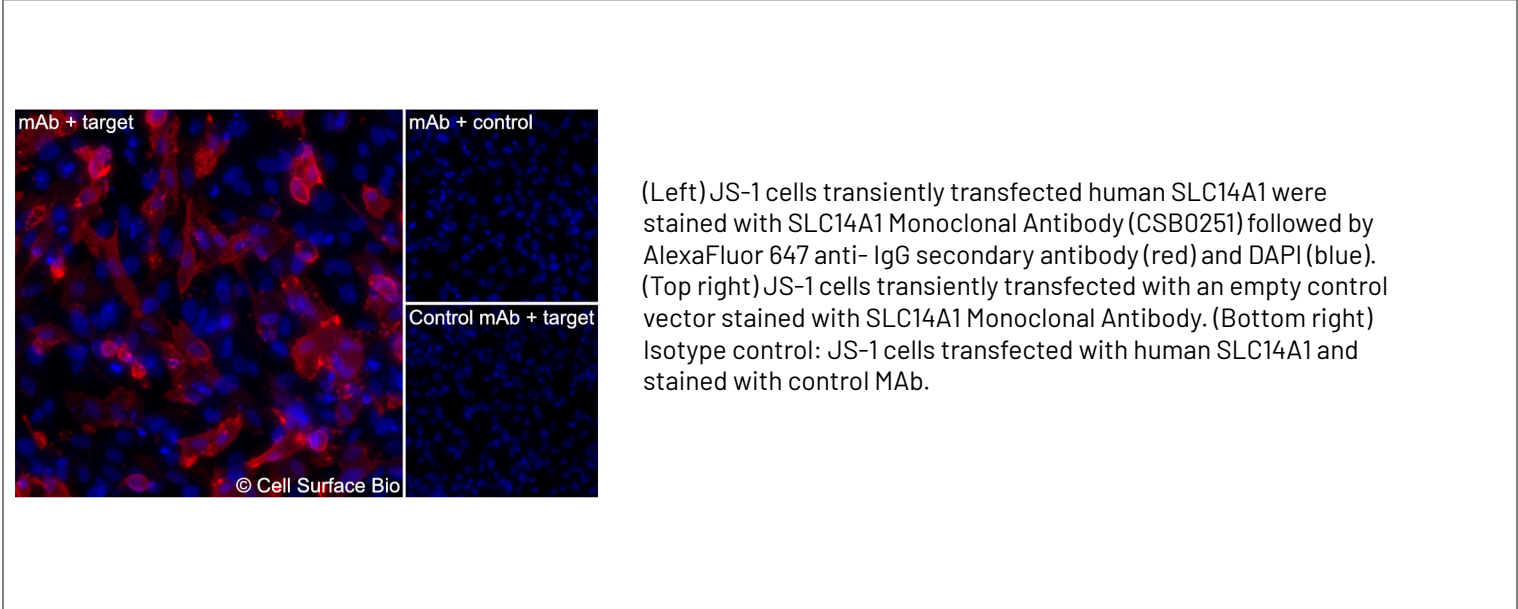
The specificity of SLC14A1 Monoclonal Antibody (CSB0251) was tested on the Membrane Proteome Array™ and shown to be specific for human SLC14A1.

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
Flow Cytometry, Extracellular	Live, Unpermeabilized	1 µg/ml



Applications	Conditions	Recommended concentration
Immunofluorescence, Extracellular	Fixed 4% paraformaldehyde	1 µg/ml



Applications

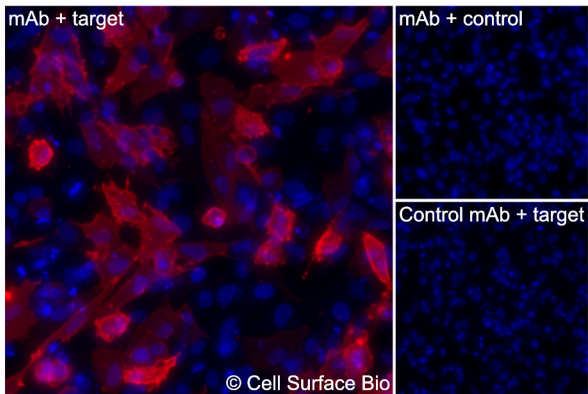
Immunofluorescence, Intracellular

Conditions

Fixed 4% paraformaldehyde,
Permeabilized 0.1% Triton X-100

Recommended concentration

1 µg/ml



(Left) JS-1 cells transiently transfected human SLC14A1 were permeabilized and stained with SLC14A1 Monoclonal Antibody (CSB0251) 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 SLC14A1 Monoclonal Antibody. (Bottom right) Isotype control: JS-1 cells transfected with human SLC14A1 and stained with control MAb.