

DESCRIPTION

Target:	KCNK4
Target aliases:	TRAAK, K2p4.1, TRAAK1, FHEIG
Fc isotype:	IgG2a
Membrane proteome specificity:	Monospecific for 6,000 membrane proteins tested
Species reactivity:	Human (Others untested)
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.

KCNK4 TARGET INFORMATION

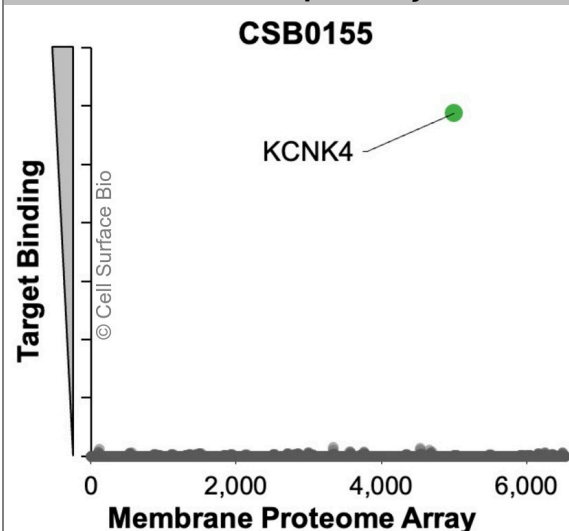
KCNK4 is a multi-pass transmembrane protein and TWIK-related arachidonic acid-stimulated two pore potassium channel. KCNK4 requires basic pH to open and opens more frequently at higher temperatures. KCNK4 is involved in pain perception. (NCBI Gene: 50801, UniProtKB/Swiss-Prot: Q9NYG8)
Other names: TRAAK, K2p4.1, TRAAK1, FHEIG

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

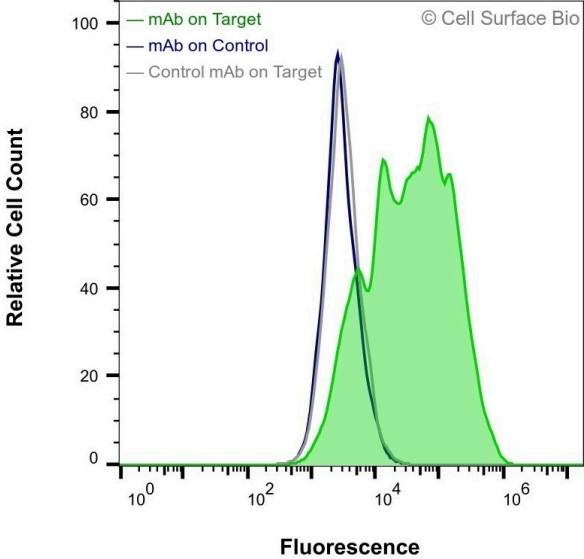
Membrane Proteome Specificity



The specificity of KCNK4 Monoclonal Antibody (CSB0155) was tested on the Membrane Proteome Array™ and shown to be specific for KCNK4.

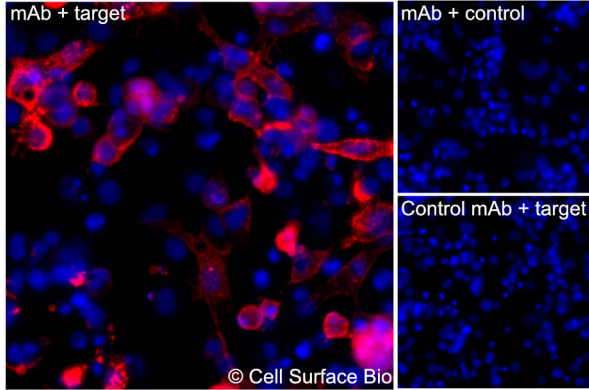
The Membrane Proteome Array™ contains 6,000 different human membrane proteins, each expressed in unfixed avian cells to ensure native conformation and post-translational modifications. The Membrane Proteome Array™ represents the industry standard for determining the binding specificity of antibodies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

Applications	Conditions	Recommended concentration
Flow Cytometry, Extracellular	Live, Unpermeabilized	1 µg/ml



HEK-293F cells transiently transfected with KCNK4 were stained with KCNK4 Monoclonal Antibody (CSB0155)(green) or isotype control antibody (gray), followed by AlexaFluor 647- conjugated anti- IgG secondary antibody. HEK-293F cells transiently transfected with an empty control vector were also stained with KCNK4 Monoclonal Antibody (CSB0155)(blue).

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



(Left) COS-7 cells transiently transfected KCNK4 were stained with KCNK4 Monoclonal Antibody (CSB0155) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) COS-7 cells transiently transfected with an empty control vector stained with KCNK4 Monoclonal Antibody. (Bottom right) Isotype control: COS-7 cells transfected with KCNK4 and stained with control MAb.

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) COS-7 cells transiently transfected KCNK4 were permeabilized and stained with KCNK4 Monoclonal Antibody (CSB0155) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) COS-7 cells transiently transfected with an empty control vector stained with KCNK4 Monoclonal Antibody. (Bottom right) Isotype control: COS-7 cells transfected with {{target}} and stained with control MAb.		