Recombinant Mouse KIRREL1/NEPH1 Protein (His Tag)

Catalog Number: PKSM041312

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*
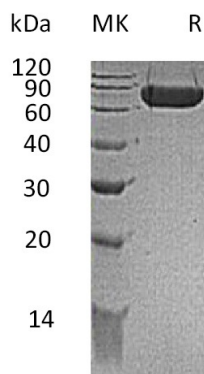
Description

Species	Mouse
Mol_Mass	53.4 kDa
Accession	Q80W68
Bio-activity	Not validated for activity

Properties

Purity	＞95％ as determined by reducing SDS-PAGE.
Endotoxin	＜1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at ＜-20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, 1mM EDTA, PH7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data

Background

Kin of irregular chiasm-like protein 1(Kirrel1), also known as Nephrin-like protein 1(Neph1), belongs to the immunoglobulin superfamily. Kirrel1 plays a significant role in the normal development and function of the glomerular permeability. It is a signaling protein that needs the presence of TEC kinases to fully trans-activate the transcription factor AP-1. The knockout of this gene could result in perinatal lethality accompanied by proteinuria, and effacement of glomerular podocytes. Kirrel1 is abundantly expressed in kidney and specifically expressed in podocytes of kidney glomeruli. Its' subunit interacts with TJP1/ZO-1 and with NPHS2/podocin (via the C-terminus) and interacts with NPHS1/ nephrin (via the Ig-like domains). This interaction is dependent on KIRREL glycosylation. Kirrel1 also interacts when tyrosine-phosphorylated with GRB2.

For Research Use Only