

Polycystin-1 Protein, Human, Recombinant (His)

General Information

Synonyms: Autosomal dominant polycystic kidney disease 1 protein;PC1;PKD1;Polycystin-1

Protein Construction: 25-636 aa

Species: Human

Expression Host: E. coli

Accession: P98161

Molecular Weight: 69.3 kDa (predicted)

AA Sequence: GPGRGCGPCEPPCLCGPAPGAACRVNCSGRGLRTLGPALRIPADATALDVSHNLLRALDVGLLANLSALAE
DISNNKISTLEEGIFANLFLNLEINLSGNPFECDCGLAWLPRWAEQQVRRVQPEAATCAGPGSLAGQPLL
LLDSGCGEEYVACLDPDNSSGTVAAVSFSAHEGLLQPEACSAFCFSTGQGLAALSEQGWCLCGAAQPSSASF
ACLSLCSGPPPPAPTCTGPTLLQHVFPASPGATLVGPHGPLASGQLAAFHIAAPLPVTATRWDFGDGSAEV
DAAGPAASHRYVLPGRYHVTAVLALGAGSALLGTDVQVEAAPALELVCSSVQSDSLDSIQNRGGSGLE
AAYSIVALGEEPARAVHPLCPDTEIFPGNGHCYRLVVEKAAWLQAQEQCQAWAGAALAMVDSPAQRFLV
SRVTRSLDVWIGFSTVQGVVEGPAPQGEAFSLESCQNWLPGEPHPATAEHCVRLGPTGWCNTDLC
SAPHYSVCELQPGGPVQDAENLLVGAPSGDLQGPLTPLAQDGLSAPHEPVEVMVFPGLRLSREAF
LTTAEFGTQELRPAQLRLQVYRLLSTAGTPENGSEPECSRSPDNRTQL

QC Testing

Biological Activity: Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.

Purity: > 85% as determined by SDS-PAGE.

Endotoxin: < 1.0 EU/μg of the protein as determined by the LAL method.

Formulation: If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose, pH 8.0.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in sterile deionized water. The product concentration should not be less than 100 μg/mL. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Component of a heteromeric calcium-permeable ion channel formed by PKD1 and PKD2 that is activated by interaction between PKD1 and a Wnt family member, such as WNT3A and WNT9B. Both PKD1 and PKD2 are required for channel activity. Involved in renal tubulogenesis. Involved in fluid-flow mechanosensation by the primary cilium in renal epithelium. Acts as a regulator of cilium length, together with PKD2. The dynamic control of cilium length is essential in the regulation of mechanotransductive signaling. The cilium length response creates a negative feedback loop whereby fluid shear-mediated deflection of the primary cilium, which decreases intracellular cAMP, leads to cilium shortening and thus decreases flow-induced signaling. May be an ion-channel regulator. Involved in adhesive protein-protein and protein-carbohydrate interactions.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481