

Recombinant Mouse CHL2/CHRD2 Protein (His Tag)

Catalog Number: PKSM040985

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

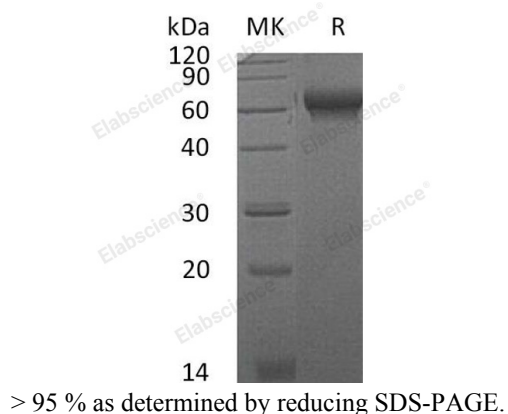
Description

Species	Mouse
Source	HEK293 Cells-derived Mouse CHL2/CHRD2 protein Gln24-Leu426, with an C-terminal His
Calculated MW	46.2 kDa
Observed MW	60-75 kDa
Accession	AAH19399.1
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 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C 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, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Reconstitution	Please refer to the specific buffer information in the printed manual. Please refer to the printed manual for detailed information.

Data



Background

Mouse Chordin-Like 2, also known as CHL2, is a novel chordin family member with structural homology to CHL1 which is implicated in tumor angiogenesis. The mouse CHL2 gene encodes a 426 amino acids (aa) protein with a 25 aa signal peptide. The mature chain of CHL2 protein contains two potential N-linked glycosylation sites, one putative NLS and three 63 aa cysteine-rich von Willebrand type C repeats (CRs). CHL2 gene is weakly expressed in the liver and kidney, partly expressed in the connective tissues of reproductive organs such as ligaments of the ovary and oviduct in females, and of testis, epididymis and certain male accessory sex glands in males. Recombinant mCHL2 protein interacted directly with five BMPs and one GDF thereby inhibiting, in vitro, several BMP/GDF-dependent processes including, osteogenic differentiation of C2C12 mesenchymal progenitor cells by several BMPs, ATDC5 embryonal carcinoma cells by GDF5 and BMP4-dependent lymphohematopoietic (CD34+CD31hi and CD34+CD31lo) progenitor cell development from ES cells. CHL2 may inhibit BMPs activity by blocking their interaction with their receptors, and has a negative regulator effect on the cartilage formation/regeneration from immature mesenchymal cells, by preventing or reducing the rate of matrix accumulation. Also, it may play a role during myoblast and osteoblast differentiation, and maturation.