Recombinant Human CHGA protein (His Tag)

Catalog Number: PDMH100095

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

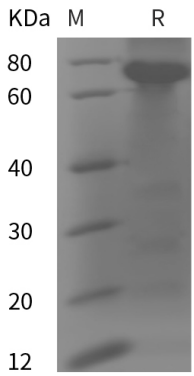
Description

Species	Human
Source	HEK293 Cells-derived Human CHGA protein Met1-Gly457, with an C-terminal His
Calculated MW	50.2 kDa
Observed MW	75 kDa
Accession	P10645
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg 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 in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Chromogranin A (CgA), also known as pituitary secretory protein I (SP-I), is a member of the granin family of regulated secretory proteins. CgA shares several protein characteristics common to the granin family: acidic isoelectric point, the capacity to bind calcium ions, the ability to form aggregates and multiple dibasic cleavage sites. Mature human CgA is 439 amino acids (aa) and contains 10 dibasic, proteolytic cleavage sites, capable of yielding several smaller peptides, each displaying a unique function. Mature human CgA shares 63% aa sequence identity with mouse and rat CgA. CgA is expressed exclusively in the secretory dense core granules of most normal and neoplastic neuroendocrine cells. Increased levels of CgA have been detected inpatients with neuroendocrine tumors as well as non-neuroendocrine tumors, hence CgA is an important serological marker for tumor diagnosis and monitoring tumorprogression/regression. It has been demonstrated in mouse model that full-length CgA containing its C-terminal region can impair angiogenesis and tumor growth. In addition, CgA can bind to Secretogranin III to regulate the biogenesis of secretory granules.