Recombinant Mouse SerpinA6/CBG Protein (His Tag)

Catalog Number: PKSM040744

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

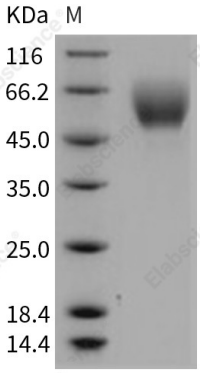
Description

Species	Mouse
Source	HEK293 Cells-derived Mouse SerpinA6/CBG protein Met 1-Ala 397, with an C-terminal His
Calculated MW	43.7 kDa
Observed MW	50-60 kDa
Accession	Q06770
Bio-activity	Not validated for activity

Properties

Purity	> 98% 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 sterile PBS, pH 7.4 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



> 98 % as determined by reducing SDS-PAGE.

Background

Corticosteroid-binding globulin (CBG), also known as SerpinA6, is a non-inhibitory member of the serine proteinase inhibitor (serpin) superfamily. It is the high-affinity transport protein for glucocorticoids in vertebrate blood. CBG is specifically cleaved by this protease at a precise site close to its carboxy-terminus. This induces a conformation change and disrupts the binding between glucocorticoids and CBG, and promotes a significant and local release of glucocorticoids (over 90% of them are bound to CBG in human plasma). In this context, CBG directs glucocorticoids to sites of inflammation, and plays in consequence a crucial role in efficient glucocorticoid action in physiology. The SerpinA6 protein is mainly secreted by the liver. This negative acute phase protein regulates free cortisol levels in the blood and distributes cortisol to its target tissues. SerpinA6 deficiency is an extremely rare hereditary disorder characterized by reduced corticosteroid-binding capacity with normal or low plasma corticosteroid-binding globulin concentration, and normal or low basal cortisol levels associated with hypo-/hypertension and muscle fatigue. There are three heritable, human CBG gene mutations that can reduce CBG-cortisol binding affinity and/or reduce circulating CBG levels.

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