

Cortisol Binding Globulin/CBG Recombinant Protein | CBG recombinant protein

Cortisol Binding Globulin/CBG Protein, Mouse, Recombinant (His & AVI Tag), Avi-tag Biotinylated, HPLC-verified

CATALOG #
AAA259248

HOST
HEK293 Cells

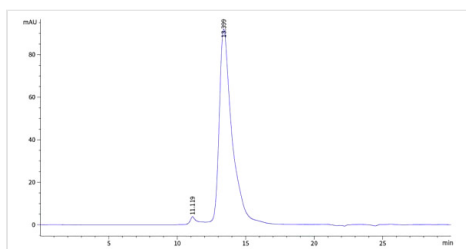
PRODUCT SYNONYMS

Cortisol Binding Globulin/CBG; Cortisol Binding Globulin/CBG Protein; Mouse; Recombinant (His & AVI Tag); Avi-tag Biotinylated; HPLC-verified; serpin peptidase inhibitor; clade A (alpha-1 antiproteinase; antitrypsin); member 6; AI265318 Protein; AV104445 Protein; Cbg Protein; SerpinA6 Protein; CBG recombinant protein

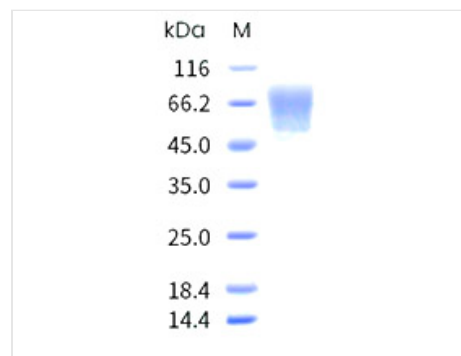
PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>= 95% as determined by SDS-PAGE. = 95% as determined by SEC-HPLC.
Form/Format	Lyophilized from sterile PBS, pH 7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Species	Mouse
Predicted N Terminal	Val 23
Endotoxin	<1.0 EU per ug protein as determined by the LAL method.
Biotin/Protein Ratio	0.7-1 as determined by the HABA assay.
Protein Construction	A DNA sequence encoding the Mouse SerpinA6 (Q06770)(Met1-Ala397) was expressed with a C-terminal Avi tag followed by a His tag. The expressed protein was biotinylated in vivo by the Biotin-Protein ligase (BirA enzyme) which is co-expressed.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

IMAGES



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for CBG recombinant protein	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.
References	Seralini GE. (1991) A new role for corticosteroid binding globulin (CBG), member of SERPIN superfamily. C R Seances Soc Biol Fil. 185(6): 500-9.Buss C, et al. (2007) Haploinsufficiency of the SERPINA6 gene is associated with severe muscle fatigue: A de novo mutation in corticosteroid-binding globulin deficiency. J Neural Transm. 114(5): 563-9. Torpy DJ, et al. (2007) Corticosteroid-binding globulin gene polymorphisms: clinical implications and links to idiopathic chronic fatigue disorders. Clin Endocrinol (Oxf). 67(2): 161-7. Braun BC, et al. (2010) Effect of mutations of the human serpin protein corticosteroid-binding globulin on cortisol-binding, thermal and protease sensitivity. J Steroid Biochem Mol Biol. 120(1): 30-7.Lin HY, et al. (2010) Molecular and structural basis of steroid hormone binding and release from corticosteroid-binding globulin. Mol Cell Endocrinol. 316(1): 3-12.

NCBI AND UNIPROT INFORMATION

NCBI GI #	6680856
NCBI GeneID	12401
NCBI Accession #	NP_031644.1
NCBI GenBank Nucleotide #	NM_007618.3
UniProt Accession #	Q06770
Molecular Weight	44,769 Da
NCBI Official Full Name	corticosteroid-binding globulin
NCBI Official Synonym Full Names	serine (or cysteine) peptidase inhibitor, clade A, member 6
NCBI Official Symbol	Serpina6
NCBI Official Synonym Symbols	Cbg
NCBI Protein Information	corticosteroid-binding globulin
UniProt Protein Name	Corticosteroid-binding globulin
UniProt Gene Name	Serpina6
UniProt Synonym Gene Names	Cbg; CBG

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.