

Synonym

GUCY2D,Retinal guanylyl cyclase 1,RETGC-1,CORD6,GUC1A4,GUC2D,ROS-GC

Source

Biotinylated Human GUCY2D, His,Avitag (GUD-H82E6) is expressed from human 293 cells (HEK293). It contains AA Ala 52 - Glu 462 (Accession # [Q02846-1](#)).

Predicted N-terminus: Ala 52

Molecular Characterization

GUCY2D(Ala 52 - Glu 462) Q02846-1	Poly-his	Avi
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This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 46.7 kDa. The protein migrates as 50-55 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Biotinylation

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Biotin:Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

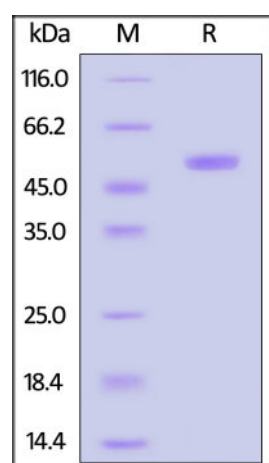
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Biotinylated Human GUCY2D, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Background

GUCY2D also known as CORD6, GUC1A4, GUC2D ROS-GC and RETGC-1, belongs to the adenylyl cyclase class-4/guanylyl cyclase family. Catalyzes the synthesis of cyclic GMP (cGMP) in rods and cones of photoreceptors. Plays an essential role in phototransduction, by mediating cGMP replenishment. May also

participate in the trafficking of membrane-associated proteins to the photoreceptor outer segment membrane.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.