

Synonym

CXADR,CAR,CAR4/6,HCAR

Source

Human CXADR, His Tag (CXR-H5222) is expressed from human 293 cells (HEK293). It contains AA Leu 20 - Gly 237 (Accession # NP_001329.1).

Predicted N-terminus: Leu 20

Molecular Characterization

CXADR(Leu 20 - Gly 237) NP_001329.1	Poly-his
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This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 24.9 kDa. The protein migrates as 32-35 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

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.

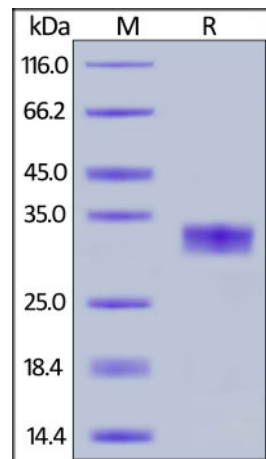
Storage

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

Human CXADR, His Tag 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

Coxsackie virus and adenovirus receptor (CXADR) is also known as CAR, is a type I transmembrane glycoprotein for group B coxsackie viruses and subgroup C adenoviruses, and belongs to the CTX family of the Ig superfamily. CAR is strongly expressed in the developing central nervous system. It functions as a homophilic and also as a heterophilic cell adhesion molecule through its interactions with extracellular matrix glycoproteins such as: fibronectin, agrin, laminin-1 and tenascin-R. Human CXADR protein contains a signal sequence, an extracellular domain (ECD) with a V type (D1) and a C2 type (D2) Iglike domain, a transmembrane segment and an intracellular domain. D1 is thought to be responsible for homodimer formation in trans within tight junctions, and is necessary and sufficient for adenovirus binding. Variants of CXADR are attached to the cell membrane by a GPI- anchor.

References

- (1) [Bergelson JM, et al., 1997, Science 275 \(5304\): 1320-3.](#)
- (2) [Tomko RP, et al., 1997, Proc Natl Acad Sci U S A 94 \(7\): 3352-6.](#)
- (3) [Patzke C, et al., 2010, Journal of Neuroscience 30 \(8\): 2897-2910.](#)
- (4) [Raschperger, E. et al., 2006, Exp. Cell Res. 312: 1566-80.](#)

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