

Recombinant Cynomolgus ANGPT1 Protein (Arg277-Phe498), HlgG1 Fc-tagged

Cat. No. ANGPT1-1066C **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Cynomolgus ANGPT1 Protein (XP_005563980.1) (Arg277-Phe498) was produced by HEK293 Cells expression system. This protein was expressed with the Fc region of human IgG1 at the N-terminus.
Species	Cynomolgus
Source	HEK293
ProteinLength	Arg277-Phe498
Description	The angiopoietin (ANGPT)-TIE2/TEK signaling pathway is essential for blood and lymphatic vascular homeostasis. ANGPT1 is a potent TIE2 activator, whereas ANGPT2 functions as a context-dependent agonist/antagonist. In disease, ANGPT2-mediated inhibition of TIE2 in blood vessels is linked to vascular leak, inflammation, and metastasis. Primary congenital glaucoma (PCG) is a leading cause of blindness in children worldwide and is caused by developmental defects in 2 aqueous humor outflow structures, Schlemm's canal (SC) and the trabecular meshwork. We previously identified loss-of-function mutations in the angiopoietin (ANGPT) receptor TEK in families with PCG and showed that ANGPT/TEK signaling is essential for SC development. A role for the major ANGPT ligands in the development of the aqueous outflow pathway. We determined that ANGPT1 is essential for SC development, and that Angpt1-knockout mice form a severely hypomorphic canal with elevated intraocular pressure. By linking ANGPT1 with PCG, these results highlight the

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	importance of ANGPT/TEK signaling in glaucoma pathogenesis and identify a candidate target for therapeutic development.
Predicted N Terminal	Glu
Form	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Molecular Mass	The recombinant cynomolgus ANGPT1 consists of 482 amino acids and predicts a molecular mass of 54.1 kDa.
Endotoxin	< 1.0 EU per µg protein as determined by the LAL method.
Purity	> 90 % as determined by SDS-PAGE.
Stability	Samples are stable for up to twelve months from date of receipt at -70 centigrade.
Storage	Store it under sterile conditions at -20 centigrade to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 mg/ml. Centrifuge the vial at 4°C before opening to recover the entire contents.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

GENE INFORMATION

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Gene Name	ANGPT1 angiotensinogen 1 [Macaca fascicularis (crab-eating macaque)]
Official Symbol	ANGPT1
Gene ID	102123994
mRNA Refseq	XM_005563923
Protein Refseq	XP_005563980

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