

Angiopoietin-like Protein 2, human recombinant (rhuARP2)

Catalog No: 99928 Lot No: XXXXX Source: *E. coli*

Synonyms: Angiopoietin-related protein 2, Angiopoietin-like protein 2, ANGPTL2, ARP2, HARP

Background

Angiopoietins belong to the vascular endothelial growth factor family and are the only known growth factors largely specific for vascular endothelium. Angiopoietins-1, -2 and -4 partake in the formation of blood vessels. ANGPTL2 displays angiogenic effects. Angiopoietin-like protein 2 (ANGPTL2) is an anti-diabetic factor. It induces sprouting in endothelial cells through autocrine and paracrine action. ANGPTL2 increases insulin sensitivity in adipocytes. In addition, ANGPTL2 is a mediator of chronic adipose tissue inflammation. ANGPTL2 is widely expressed in the heart, small intestine, spleen and stomach. ANGPTL2 is also found in lower levels in the colon, overy, adrenal gland, skeletal muscle and prostate.

Description

ANGPTL2 Human Recombinant, produced in *E. coli*, is a single, non-glycosylated, polypeptide chain containing 481 amino acids including a 10 amino acid N-terminal His tag. The total molecular mass is 56 kDa (calculated).

Physical Appearance

Filtered, white lyophilized (freeze-dried) powder.

Formulation

ANGPTL2 was filtered (0.4 µm) and lyophilized from 0.5 mg/ml in 0.03 M acetate buffer (pH 4.0).

Solubility

It is recommended to add 0.1 M acetate buffer (pH 4) to prepare a working stock solution of approximately 0.5 mg/ml and let the lyophilized pellet dissolve completely. For conversion into higher pH value, an intensive dilution by relevant buffer to a concentration of 10 g/ml is recommended. In higher concentrations the solubility of the ANGPTL2 is limited. ANGPTL2 is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

Stability

Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time. It does not show any change after two weeks at 4°C.

Amino Acid Sequence

MKHHHHHHAS	QEDGFEGTEE	GSPREFIYLN	${\tt RYKRAGESQD}$	KCTYTFIVPQ	QRVTGAICVN	SKEPEVLLEN	RVHKQELELL	
NNELLKQKRQ	IETLQQLVEV	DGGIVSEVKL	LRKESRNMNS	${\tt RVTQLYMQLL}$	HEIIRKRDNA	LELSQLENRI	LNQTADMLQL	
ASKYKDLEHK	YQHLATLAHN	QSEIIAQLEE	HCQRVPSARP	VPQPPPAAPP	RVYQPPTYNR	IINQISTNEI	QSDQNLKVLP	
PPLPTMPTLT	${\tt SLPSSTDKPS}$	GPWRDCLQAL	EDGHDTSSIY	LVKPENTNRL	MQVWCDQRHD	PGGWTVIQRR	LDGSVNFFRN	
WETYKQGFGN	IDGEYWLGLE	NIYWLTNQGN	YKLLVTMEDW	SGRKVFAEYA	SFRLEPESEY	YKLRLGRYHG	NAGDSFTWHN	
GKOFTTLDRD	HDVYTGNCAH	YOKGGWWYNA	CAHSNLNGVW	YRGGHYRSRY	ODGVYWAEFR	GGSYSLKKVV	MMIRPNPNTF	Н

Usage

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