

MEGF10 Protein, Human (HEK293, His)

Cat. No.:	HY-P76491
Synonyms:	Multiple epidermal growth factor-like domains protein 10; KIAA1780
Species:	Human
Source:	HEK293
Accession:	Q96KG7-1 (L26-G857)
Gene ID:	84466
Molecular Weight:	Approximately 95-120 kDa due to the glycosylation.

PROPERTIES

AA Sequence

L N L E D P N V C S	H W E S Y S V T V Q	E S Y P H P F D Q I	Y Y T S C T D I L N
W F K C T R H R V S	Y R T A Y R H G E K	T M Y R R K S Q C C	P G F Y E S G E M C
V P H C A D K C V H	G R C I A P N T C Q	C E P G W G G T N C	S S A C D G D H W G
P H C T S R C Q C K	N G A L C N P I T G	A C H C A A G F R G	W R C E D R C E Q G
T Y G N D C H Q R C	Q C Q N G A T C D H	V T G E C R C P P G	Y T G A F C E D L C
P P G K H G P Q C E	Q R C P C Q N G G V	C H H V T G E C S C	P S G W M G T V C G
Q P C P E G R F G K	N C S Q E C Q C H N	G G T C D A A T G Q	C H C S P G Y T G E
R C Q D E C P V G T	Y G V L C A E T C Q	C V N G G K C Y H V	S G A C L C E A G F
A G E R C E A R L C	P E G L Y G I K C D	K R C P C H L E N T	H S C H P M S G E C
A C K P G W S G L Y	C N E T C S P G F Y	G E A C Q Q I C S C	Q N G A D C D S V T
G K C T C A P G F K	G I D C S T P C P L	G T Y G I N C S S R	C G C K N D A V C S
P V D G S C T C K A	G W H G V D C S I R	C P S G T W G F G C	N L T C Q C L N G G
A C N T L D G T C T	C A P G W R G E K C	E L P C Q D G T Y G	L N C A E R C D C S
H A D G C H P T T G	H C R C L P G W S G	V H C D S V C A E G	R W G P N C S L P C
Y C K N G A S C S P	D D G I C E C A P G	F R G T T C Q R I C	S P G F Y G H R C S
Q T C P Q C V H S S	G P C H H I T G L C	D C L P G F T G A L	C N E V C P S G R F
G K N C A G I C T C	T N N G T C N P I D	R S C Q C Y P G W I	G S D C S Q P C P P
A H W G P N C I H T	C N C H N G A F C S	A Y D G E C K C T P	G W T G L Y C T Q R
C P L G F Y G K D C	A L I C Q C Q N G A	D C D H I S G Q C T	C R T G F M G R H C
E Q K C P S G T Y G	Y G C R Q I C D C L	N N S T C D H I T G	T C Y C S P G W K G
A R C D Q A G V I I	V G N L N S L S R T	S T A L P A D S Y Q	I G

Biological Activity

Measured in a cell proliferation assay using C2C12 cells. The ED₅₀ for this effect is 32.22 ng/mL, corresponding to a specific activity is 3.10×10⁴ units/mg.

Appearance

Lyophilized powder

Formulation

Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.

Endotoxin Level

<1 EU/μg, determined by LAL method.

Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

MEGF10 Protein, a membrane receptor, plays a pivotal role in phagocytosis by macrophages and astrocytes, particularly in the clearance of apoptotic cells. As a receptor for C1q, an eat-me signal, MEGF10 binds to phosphatidylserine on the surface of apoptotic cells, facilitating their engulfment. The protein collaborates with ABCA1 during this process and contributes to the formation of large intracellular vacuoles, potentially involved in the uptake of amyloid-beta peptides. In addition to its role in apoptotic cell clearance, MEGF10 is essential for astrocyte-mediated clearance of apoptotic neurons in the developing cerebellum. Furthermore, MEGF10 influences muscle cell proliferation, adhesion, and motility, playing a crucial role in the regulation of myogenesis and the balance between skeletal muscle satellite cell proliferation and differentiation through the notch signaling pathway. Additionally, MEGF10 may contribute to the mosaic spacing of specific neuron subtypes in the retina, ensuring an even distribution across the retina for comprehensive visual field processing. The protein forms homomers and interacts with GULP1, ABCA1, AP2M1, and NOTCH1, highlighting its multifaceted roles in various cellular processes.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA