Basigin/CD147 Protein, Mouse (304a.a, HEK293, His)

Cat. No.:	HY-P72751
Synonyms:	Basigin; HT7 antigen; CD147; Bsg; EMMPRIN
Species:	Mouse
Source:	HEK293
Accession:	P18572 (A22-R325)
Gene ID:	12215
Molecular Weight:	45-65 kDa

PROPERTIES

AA Sequence	A A G F L K A P L S Q E R W A G G S V V L H C E A V G S P I P E I Q W W F E G N A P N D S C S Q L W D G A R L D R V H I H A A Y R Q H A A S S L S V D G L T A E D T G T Y E C R A S S D P D R N H L T R P P R V K W V R A Q A S V V V L E P G T I Q T S V Q E V N S K T Q L T C S L N S S G V D I V G H R W M R G G K V L Q E D T L P D L H T K Y I V D A D D R S G E Y S C I F L P E P V G R S E I N V E G P P R I K V G K K S E H S S E G E L A K L V C K S D A S Y P P I T D W F W F K T S D T G E E E A I T N S T E A N G K Y V V V S T P E K S Q L T I S N L D V N V D P G T Y V C N A T N A Q G T T R E T I S L R V R S R
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.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O. 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	Basigin/CD147 protein is indispensable for normal retinal maturation and development, acting as a crucial cell surface receptor for NXNL1 and contributing significantly to NXNL1-mediated survival of retinal cone photoreceptors. In collaboration with the glucose transporter SLC16A1/GLUT1 and NXNL1, Basigin/CD147 promotes retinal cone survival by enhancing aerobic glycolysis and facilitating the entry of glucose into photoreceptors. It serves as a signaling receptor for

cyclophilins, playing an essential role in PPIA/CYPA and PPIB/CYPB-dependent signaling related to the chemotaxis and adhesion of immune cells. Additionally, Basigin/CD147 is pivotal in targeting the monocarboxylate transporters SLC16A1, SLC16A3, and SLC16A8 to the plasma membrane. Acting as a coreceptor for vascular endothelial growth factor receptor 2 (KDR/VEGFR2) in endothelial cells, it enhances VEGFA-mediated activation and downstream signaling, promoting angiogenesis through EPAS1/HIF2A-mediated up-regulation of VEGFA and KDR/VEGFR2. Moreover, Basigin/CD147 plays a crucial role in spermatogenesis, mediating interactions between germ cells and Sertoli cells and proving essential for the development and differentiation of germ cells into round spermatids.

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