CD47 Protein, Human (Biotinylated, HEK293, Fc)

Cat. No.:	HY-P78094
Synonyms:	CD47 glycoprotein; CD47 molecule; CD47; IAP; OA3; MER6
Species:	Human
Source:	HEK293
Accession:	Q08722 (Q19-P139)
Gene ID:	961
Molecular Weight:	55-65 kDa

PROPERTIES

Appearance	Solution.
Formulation	Supplied as a 0.22 μm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	N/A.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background	CD47, an adhesive protein, facilitates cell-to-cell interactions and serves as a receptor for thrombospondin THBS1, modulating integrin signaling through the activation of heterotrimeric G proteins. Involved in diverse cellular processes, CD47 contributes to signal transduction, cardiovascular homeostasis, inflammation, apoptosis, angiogenesis, cellular self-renewal, and immunoregulation. Notably, it plays a role in modulating pulmonary endothelin EDN1 signaling and functions as a pressor agent in the regulation of blood pressure in response to THBS1. CD47 is crucial for memory formation and synaptic plasticity in the hippocampus, acting as a receptor for SIRPA and SIRPG, which impacts dendritic cell maturation, cytokine production, cell-cell adhesion, and T-cell activation. Furthermore, CD47 positively modulates FAS-dependent apoptosis in T-cells and suppresses angiogenesis, contributing to metabolic dysregulation during aging. In response to THBS1, CD47 negatively modulates wound healing, inhibits stem cell self-renewal, and may play a role in membrane transport and/or integrin-dependent signal transduction. As a monomer, CD47 interacts with THBS1, SIRPA, FAS/CD95, SIRPG, UBQLN1, UBQLN2, and potentially fibrinogen, highlighting its intricate involvement in cellular and molecular pathways.

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

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