

# Product Data Sheet

## CD47 Protein, Human (HEK293, His)

Cat. No.:	HY-P7336
Synonyms:	rHuCD47, His; CD47; MER6; IAP; OA3
Species:	Human
Source:	HEK293
Accession:	Q08722/NP_942088.1 (Q19-P139)
Gene ID:	961
Molecular Weight:	30-45 kDa

PROPERTIES		
AA Sequence	QLLFNKTKSV EFTFCNDTVV IPCFVTNMEA QNTTEVYVKW KFKGRDIYTF DGALNKSTVP TDFSSAKIEV SQLLKGDASL KMDKSDAVSH TGNYTCEVTE LTREGETIIE LKYRVVSWFS PHHHHHH	
Biological Activity	<ol> <li>1.2 μg/mL (100 μL/well) of immoblized recombinant human CD47-His can bind human SIRPa-Fc with a linear range of 20-65 ng/mL.</li> <li>2.Immobilized Human SIRPA-Fc at 10 μg/mL (100 μl/well) can bind Human CD47-His .The ED<sub>50</sub> is 13.21 ng/mL</li> <li>3. Immobilized Human CD47, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Human SIRP alpha, hFc Tag with the EC<sub>50</sub> of 46.8ng/ml determined by ELISA (QC Test).</li> <li>4. Human CD47, His Tag captured on CM5 Chip via Anti-His Antibody can bind Human SIRP alpha, hFc Tag with an affinity constant of 18.9nM as determined in SPR assay (Biacore T200).</li> <li>5.Measured by its binding ability in a functional ELISA. Immobilized Human SIRP alpha at 5 µg/mL (100 µL/well) can bind Biotinylated Human CD47 protein. The ED<sub>50</sub> for this effect is 388.5 ng/mL.</li> </ol>	
Appearance	Lyophilized powder	
Formulation	Lyophilized after extensive dialysis against PBS or 10 mM Tris-Citrate, 150 mM NaCl, pH 8.0 or 20 mM PB, 150 mM NaCl, 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 <sub>2</sub> 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

Targeting CD47 is in the spotlight of cancer immunotherapy. Blocking CD47 triggers the recognition and elimination of cancer cells by the innate immunity. The CD47/SIRP- $\alpha$  axis has been established as an important regulator of innate anti-cancer immunity, with many if not all malignancies overexpressing the receptor CD47 that binds to phagocyte-expressed SIRP- $\alpha$ <sup>[1]</sup>.

### REFERENCES

[1]. Huang Y, et al. Targeting CD47: the achievements and concerns of current studies on cancer immunotherapy. J Thorac Dis. 2017 Feb;9(2):E168-E174.

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

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