



# CERTIFICATE OF ANALYSIS

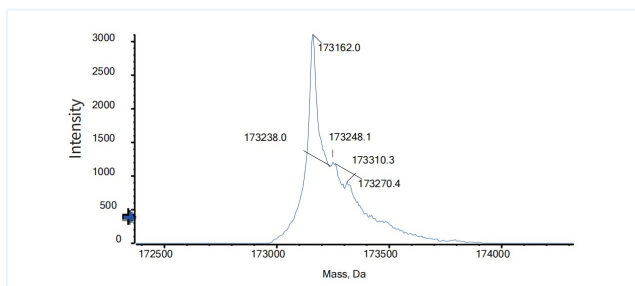


## Product Details

Product name:	Anti-CD47 & PD-1 Reference Antibody (Hx009)	Lot.No.:	P262519
Target:	PDCD1 / PD-1 / CD279, CD47	Catalog:	CHBA014
Target Accession:	Q08722 & Q15116	Concentration :	1 mg/mL
Clonality:	Bispecific	Isotype:	IgG-Fusion Protein
Reactivity:	Human	Molecular Weight (kDa) :	173.16 kDa
Application:	Kinetics (SPR), ELISA, Bioactivity: FACS, Functional assay, Research in vivo	Endotoxin:	<1 EU/mg
Formulation:	Liquid: 100mM Pro-Ac, 20mM Arg pH 5.0   Lyophilization: 25mM histidine, 8% sucrose, 0.01% Tween80 pH6.2	Conjugation:	Unconjugated
Reconstitution:	For Powder, reconstitute with sterile, distilled water to a final concentration of 1 mg/ml. Gently shake to solubilize completely. Do not vortex.	Expression System:	CHO
Storage:	Upon receipt, store immediately at -20°C or lower for 24 months. Store aliquots at -80°C for up to 3 months. Avoid repeated freeze-thaw cycles.	Purification:	Protein A

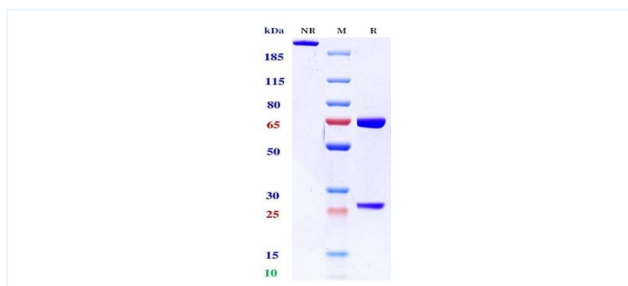
# Data

## MASS



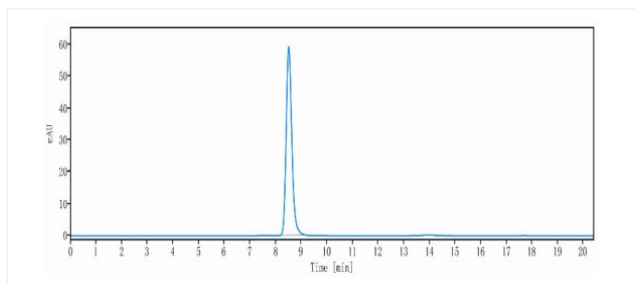
The detected molecular weight of Anti-CD47 & PD-1 Reference Antibody (Hx009) is 173.16 kDa.

## Purity: SDS-PAGE



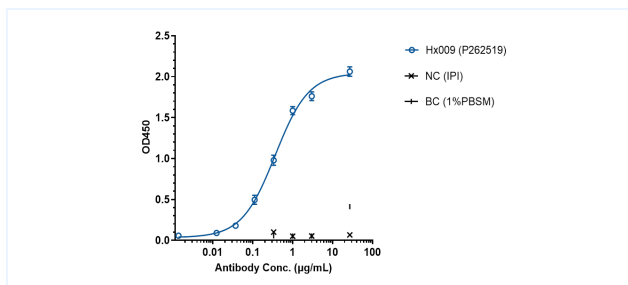
Anti-CD47 & PD-1 Reference Antibody (Hx009) on SDS-PAGE under reducing (R) condition. The purity of the protein is greater than 95%.

## Purity: SEC-HPLC



The purity of Anti-CD47 & PD-1 Reference Antibody (Hx009) is 100%, determined by SEC-HPLC.

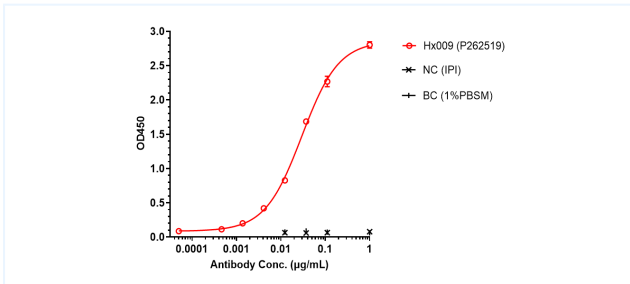
## ELISA



Hx009 bound to CD47 protein, and then rebounded to secondary antibodies (Anti-Human-IgG-Fc-HRP), and read OD450. As shown in fig, Hx009 bound to CD47-His, and the EC50 was 0.364 nM.

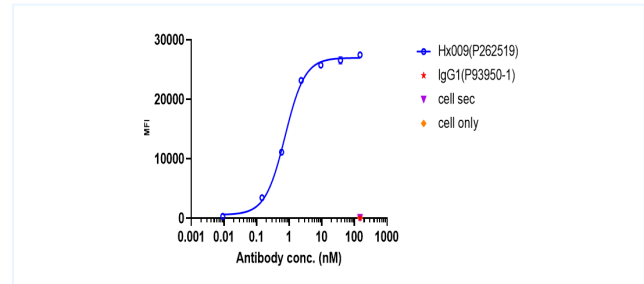
The products are for research use only. Not for use in diagnostic procedures.

## ELISA



Hx009 bound to PD-1 protein, and then rebounded to secondary antibodies(Anti-Human- $\kappa$ + $\lambda$ -HRP), and read OD450. As shown in fig, Hx009 bound to PD-1-FC, and the EC50 was 0.030 nM.

## Bioactivity: FACS



Hx009 bound to huPD-1-Jurkat cells, and then rebounded to fluorescent secondary antibodies(Anti-Human IgG, Fcy PE), and test by flow cytometry. As shown in fig, Hx009 bound to huPD-1-Jurkat cells, and the EC50 was 0.747 nM.

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