

# Biotinylated Human CD20 Protein-VLP

Cat. No. CD2-HM123B



## Description

|                  |                                                                           |
|------------------|---------------------------------------------------------------------------|
| Source           | Recombinant Biotinylated Human CD20 Protein-VLP is expressed from HEK293. |
|                  | It contains Met1-Pro297.                                                  |
| Accession        | P11836-1                                                                  |
| Molecular Weight | The target protein has a predicted MW of 34.3 kDa.                        |
| Endotoxin        | Less than 1EU per µg by the LAL method.                                   |
| Purity           | > 95% as determined by HPLC                                               |

## Formulation and Storage

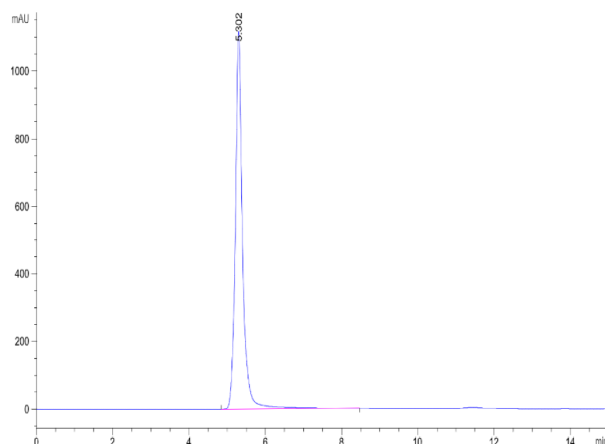
|             |                                                                                                                                                                                  |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Formulation | Supplied as 0.22µm filtered solution in PBS, 300mM L-Arginine (pH 7.4).                                                                                                          |
| Storage     | Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles. |

## Background

B-lymphocyte antigen CD20 or CD20 is an activated-glycosylated phosphoprotein expressed on the surface of all B-cells beginning at the pro-B phase (CD45R , CD117) and progressively increasing in concentration until maturity. CD20 is the target of the monoclonal antibodies rituximab, ocrelizumab, obinutuzumab, ofatumumab, ibritumomab tiuxetan, tositumomab, and ublituximab, which are all active agents in the treatment of all B cell lymphomas, leukemias, and B cell-mediated autoimmune diseases.

## Assay Data

### SEC-HPLC

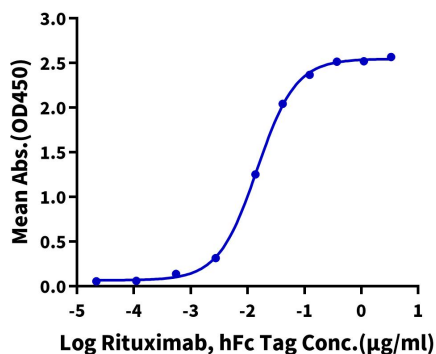


The purity of Biotinylated Human CD20 VLP is greater than 95% as determined by SEC-HPLC.

### ELISA Data

#### Biotinylated Human CD20 VLP ELISA

0.5µg Biotinylated Human CD20 VLP Per Well



Immobilized Biotinylated Human CD20 VLP at 5µg/ml (100µl/well) on the streptavidin precoated plate (5µg/ml). Dose response curve for Rituximab, hFc Tag with the EC50 of 14.7ng/ml determined by ELISA (QC Test).

Biotinylated Human CD20 Protein-VLP

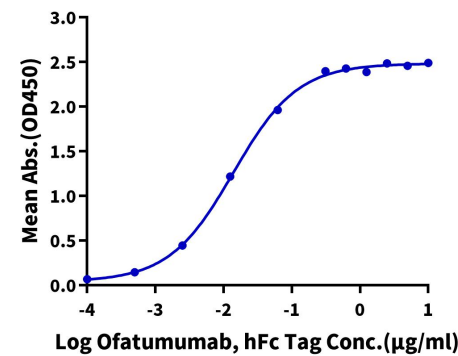
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Assay Data

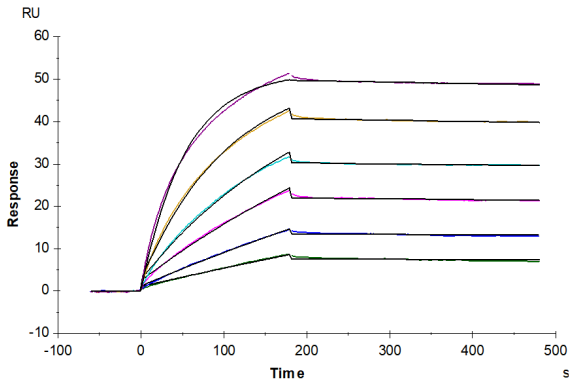
ELISA Data

**Biotinylated Human CD20 VLP ELISA**  
0.5µg Biotinylated Human CD20 VLP Per Well



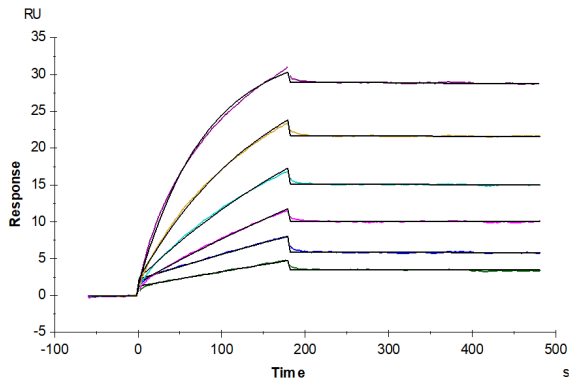
Immobilized Biotinylated Human CD20 VLP at 5µg/ml (100µl/well) on the streptavidin precoated plate (5µg/ml). Dose response curve for Ofatumumab, hFc Tag with the EC50 of 13.9ng/ml determined by ELISA.

SPR Data



Biotinylated Human CD20 VLP captured on CM5 Chip via streptavidin can bind Rituximab, hFc Tag with an affinity constant of 0.40 nM as determined in SPR assay (Biacore T200) (QC Test).

SPR Data



Biotinylated Human CD20 VLP captured on CM5 Chip via streptavidin can bind Ofatumumab, hFc Tag with an affinity constant of 0.22 nM as determined in SPR assay (Biacore T200).