Biotinylated Human NY-ESO-1 TCR&CD3 Complex Nanodisc

Cat. No. TCC-HM101

Description

Source	Recombinant Biotinylated Human NY-ESO-1 TCR&CD3 Complex Nanodisc is expressed from HEK293. Both the biotin and the His tag are located on the C-terminus of the NY-ESO-1 TCR.
	It contains NY-ESO-1 specific TCR (1G4c113), CD3ε&CD3γ, CD3ε&CD3δ, and CD3ζ dimers.
Molecular Weight	The protein has a predicted MW of 194.8 kDa.
Endotoxin	Less than 1 EU per μg by the LAL method.

Formulation and Storage

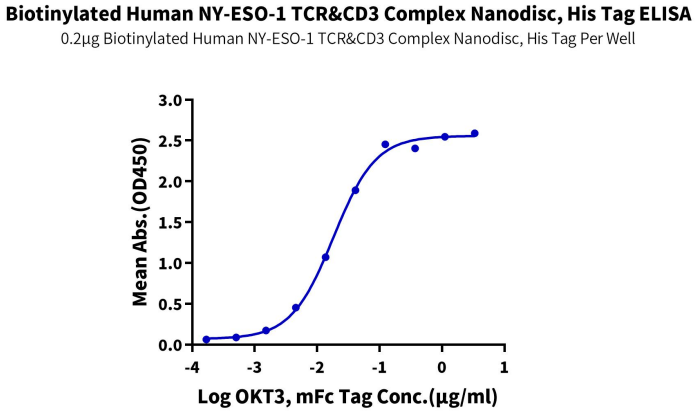
Formulation	Supplied as 0.22 μm filtered solution in PBS, 200mM L-arginine (pH 7.4). Notice: Not recommended for flow cytometry.
Storage	Valid for 6 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

The 1G4c113 TCR is an engineered, affinity-matured variant of the 1G4 T-cell receptor that specifically recognizes the peptide fragment of NY-ESO-1 (SLLMWITQC) presented on the HLA-A*02:01. Cluster of Differentiation 3 (CD3) is a multimeric protein complex and T cell co-receptor that plays an essential role in adaptive immune responses. These CD3 dimers bind non-covalently to the TCR to form the TCR&CD3 complex on the cell surface.

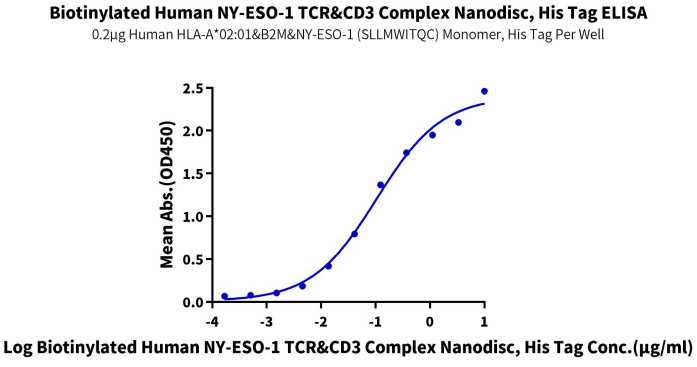
Assay Data

ELISA Data



Immobilized Biotinylated Human NY-ESO-1 TCR&CD3 Complex Nanodisc, His Tag at 2μg/ml (100μl/well) on the streptavidin precoated plate (5μg/ml). Dose response curve for OKT3, mFc Tag with the EC50 of 18.3ng/ml determined by ELISA.

ELISA Data



Immobilized Human HLA-A*02:01&B2M&NY-ESO-1 (SLLMWITQC) Monomer, His Tag at 2μg/ml (100μl/well) on the plate. Dose response curve for Biotinylated Human NY-ESO-1 TCR&CD3 Complex Nanodisc, His Tag with the EC50 of 0.1μg/ml determined by ELISA.

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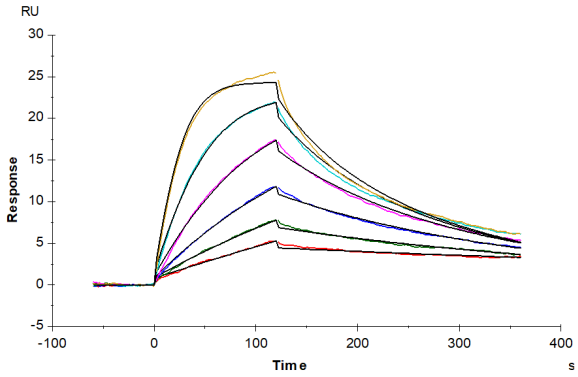
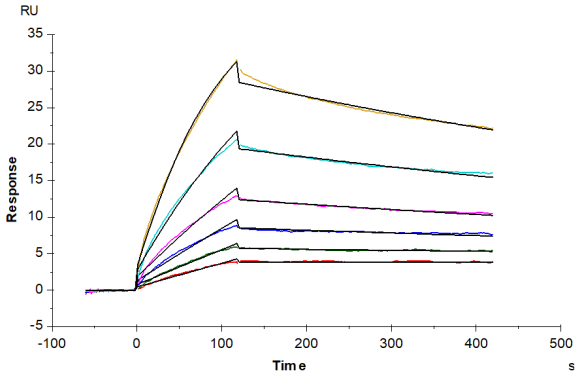
Assay Data

SPR Data



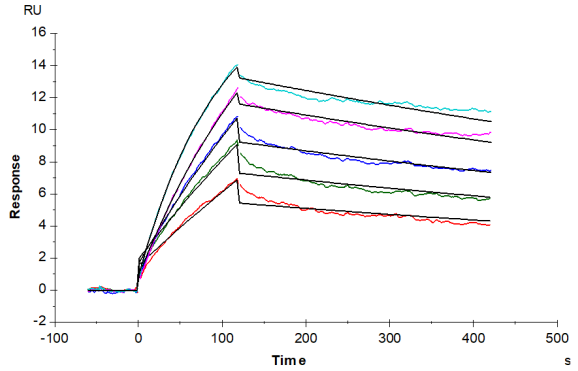
Biotinylated Human NY-ESO-1 TCR&CD3 Complex Nanodisc, His Tag captured on CM5 Chip via Streptavidin can bind OKT3, mFc Tag with an affinity constant of 0.20 nM as determined in SPR assay (Biacore T200).

SPR Data



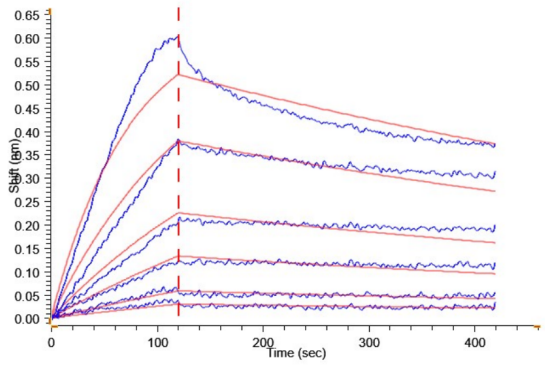
OKT3, mFc Tag captured on CM5 Chip via Protein A can bind Biotinylated Human NY-ESO-1 TCR&CD3 Complex Nanodisc, His Tag with an affinity constant of 0.33 nM as determined in SPR assay (Biacore T200).

SPR Data



Biotinylated Human NY-ESO-1 TCR&CD3 Complex Nanodisc captured on CM5 Chip via Streptavidin can bind Human HLA-A*02:01&B2M&NY-ESO-1 (SLLMWITQC) Monomer, His Tag with an affinity constant of 0.78 nM as determined in SPR assay (Biacore T200).

BLI Data



Biotinylated Human NY-ESO-1 TCR&CD3 Complex Nanodisc, His Tag on Streptavidin-Biosensor can bind OKT3, mFc Tag with an affinity constant of 0.89 nM as determined in BLI assay (Gator® Prime).

BLI Data

Biotinylated Human NY-ESO-1 TCR&CD3 Complex Nanodisc

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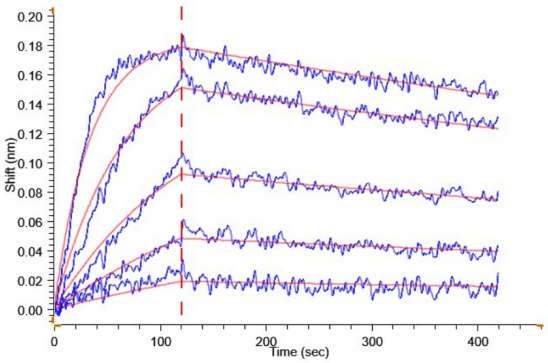
Assay Data



Loaded Biotinylated Human NY-ESO-1 TCR&CD3 Complex Nanodisc, His Tag on Streptavidin-Biosensor can bind Human HLA-A*02:01&B2M&NY-ESO-1 (SLLMWITQC) Monomer, His Tag with an affinity constant of 2.37 nM as determined in BLI assay (Gator® Prime).