

**PRODUCT INFORMATION**

<b>Tag</b>	C-Flag&Strep Tag
<b>Target</b>	STEAP1
<b>Synonyms</b>	PRSS24; STEAP
<b>Description</b>	Human STEAP1-Strep full length protein-synthetic nanodisc
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	Q9UHE8
<b>Expression Host</b>	HEK293
<b>Protein Families</b>	Transmembrane
<b>Protein Pathways</b>	N/A
<b>Molecular Weight</b>	The human full length STEAP1-Strep protein has a MW of 39.9 kDa
<b>Formulation &amp; Reconstitution</b>	Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions. Do not use solvents with a pH below 6.5 or those containing high concentrations of divalent metal ions (greater than 5 mM) in subsequent experiments.
<b>Storage&amp;Shipping</b>	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
<b>Background</b>	STEAP1 is a cell-surface biomolecule composed by six transmembrane domains connected by intra- and extracellular loops. It is commonly found overexpressed in several types of cancers, namely in PCa, and is preferentially located at the tight or gap junctions. However, in nontumoural tissues and vital organs, STEAP1 protein presents low or absent expression, unveiling considerable specificity for cancer environment. Taking into account STEAP1 predicted transmembrane topology and cellular localization, it has been hypothesized that STEAP1 may play an important role as a transporter protein and can be involved in intercellular communication.
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



### ELISA assay to evaluate STEAP1-Strep-Nanodisc 0.2 $\mu$ g Human STEAP1-Strep-Nanodisc per well

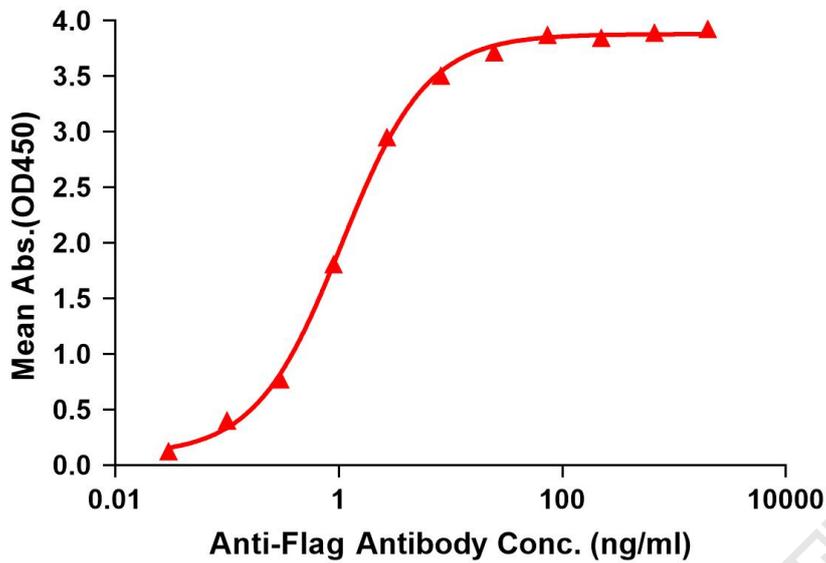


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag STEAP1-Strep-Nanodisc (0.2 $\mu$ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with STEAP1-Strep-nanodisc is 1.059ng/ml.

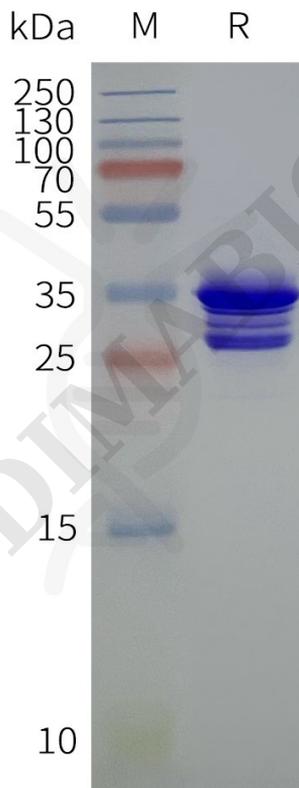


Figure 2. Human STEAP1-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE

