PRODUCT INFORMATION

Tag	C-Flag Tag
Expression Host	HEK293
Target	CXCR6
Synonyms	BONZO; CD186; CDw186; STRL33; TYMSTR
Description	Human CXCR6 full length protein-synthetic nanodisc
Uniprot ID	O00574
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	Chemokine signaling pathway, Cytokine-cytokine receptor interaction
Molecular Weight	The human full length CXCR6 protein has a MW of 39.3 kDa
Delivery	In Stock
Formulation & Reconstitution	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.
Sterility	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 µm) prior to use.
Storage&Shipping	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.
Background	A G protein-coupled receptor with seven transmembrane domains that belongs to the CXC chemokine receptor family. This family also includes CXCR1, CXCR2, CXCR3, CXCR4, CXCR5, and CXCR7. This gene, which maps to the chemokine receptor gene cluster, is expressed in several T lymphocyte subsets and bone marrow stromal cells. The encoded protein and its exclusive ligand, chemokine ligand 16 (CCL16), are part of a signalling pathway that regulates T lymphocyte migration to various peripheral tissues (the liver, spleen red pulp, intestine, lungs, and skin) and promotes cell-cell interaction with dendritic cells and fibroblastic reticular cells. CXCR6/CCL16 also controls the localization of resident memory T lymphocytes to different compartments of the lung and maintains airway resident memory T lymphocytes, which are an important first line of defense against respiratory pathogens. The encoded protein serves as an entry coreceptor used by HIV-1 and SIV to enter target cells, in conjunction with CD4.
Usage	Research use only
Conjugate	Unconjugated

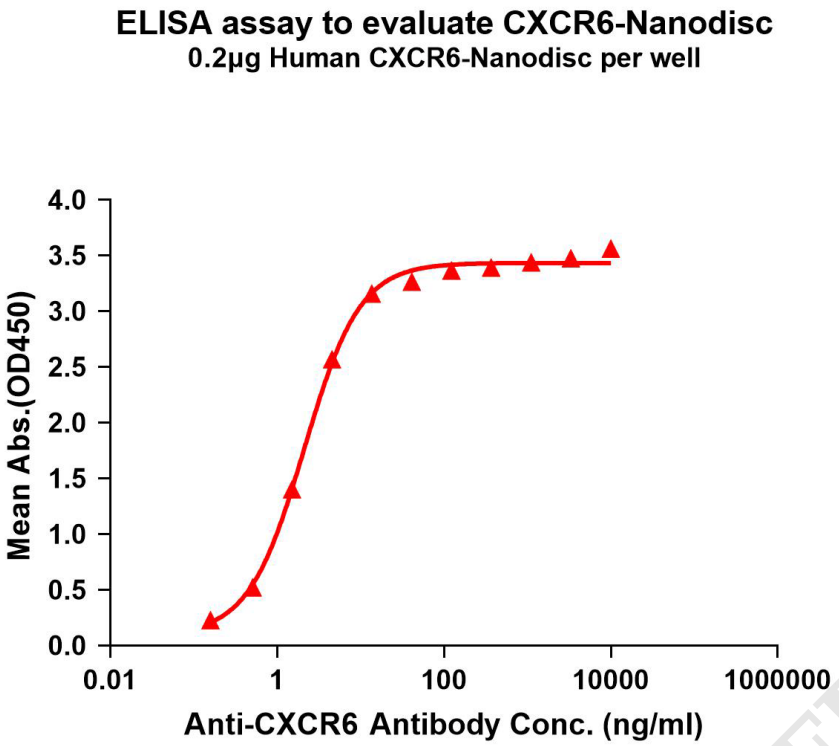

Figure 1. Elisa plates were pre-coated with Flag Tag CXCR6-Nanodisc (0.2μg/per well). Serial diluted anti-CXCR6 monoclonal antibody (DMC101533) solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-CXCR6 monoclonal antibody binding with CXCR6-Nanodisc is 2.190ng/ml.

Figure 2. Human CXCR6-Nanodisc, Flag Tag on SDS-PAGE