HUMAN EMP2 FULL LENGTH PROTEIN

Cat.#: 12245
Product Name: Human EMP2 Full Length Protein
Size : 10 µg, 50 µg and 100 µg
Synonyms: XMP
Target: EMP2 (epithelial membrane protein 2)
UNIPROT ID: P54851
Description: Human EMP2 full length protein-synthetic nanodisc
Background: EMP-2 (epithelial membrane protein 2), also known as XMP, is a 167 amino acid multi-pass membrane protein that contains four-transmembrane domains and belongs to the GAS3/PMP22 (growth arrest-specific-3/peripheral myelin protein-22) family. It has been associated with various functions including endocytosis, cell signaling, cell proliferation, cell migration, cell adhesion, cell death, cholesterol homeostasis, urinary albumin excretion, and embryo implantation. Localized to lipid raft domains in the plasma membrane, EMP-2 regulates the expression of several target proteins and is necessary for blastocyst implantation in the uterine endometrium. Specifically, EMP-2 mediates blastocyst implantation by controlling the cell membrane expression of MHC and glycosylphosphatidylinositol-anchored proteins, as well as Integrins and caveolin-1. In adult tissues, EMP-2 is expressed in heart, lung, ovary and intestine, while fetal expression is highest in kidney, brain and liver. Overexpression of EMP-2 is associated with endometrial adenocarcinoma, suggesting a possible role for EMP-2 in tumorigenesis.
Species/Host: HEK293
Molecular Weight: The human full length EMP2 protein has a MW of 19.2 kDa
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.
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.

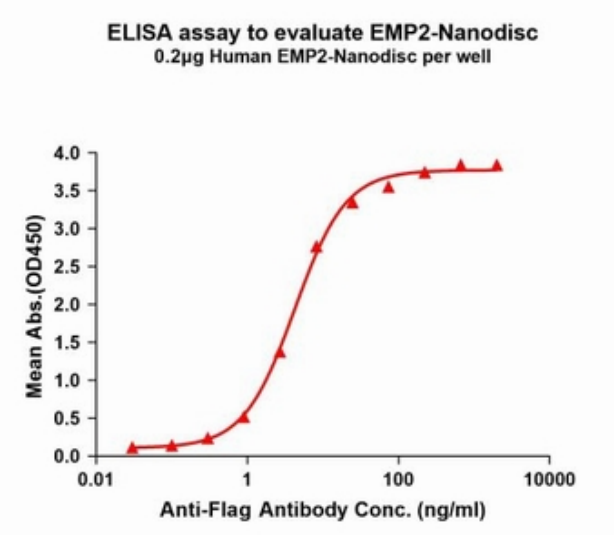

Figure1. Elisa plates were pre-coated with Flag Tag EMP2-Nanodisc (0.2 μg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with EMP2-Nanodisc is 4.249ng/ml.

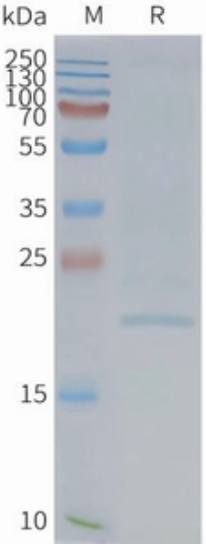

Figure2. Human EMP2-Nanodisc, Flag Tag on SDS-PAGE