PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Expression Host	HEK293
Target	AQP7
Synonyms	AQP7L; AQPap
Description	Mouse Aqp7-Strep full length protein-synthetic nanodisc
Uniprot ID	O54794
Protein Families	N/A
Protein Pathways	N/A
Molecular Weight	The mouse full length Aqp7-Strep protein has a MW of 32.7 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	Forms a channel that mediates water and glycerol transport across cell membranes at neutral pH (PubMed:15591341, PubMed:15746100, PubMed:16009937). The channel is also permeable to urea (By similarity). Plays an important role in body energy homeostasis under conditions that promote lipid catabolism, giving rise to glycerol and free fatty acids (PubMed:15591341, PubMed:16009937). Mediates glycerol export from adipocytes (PubMed:15591341, PubMed:15746100, PubMed:16009937). After release into the blood stream, glycerol is used for gluconeogenesis in the liver to maintain normal blood glucose levels and prevent fasting hypoglycemia (PubMed:15591341). Required for normal glycerol reabsorption in the kidney (PubMed:15998844, PubMed:17077387).
Usage	Research use only
Conjugate	Unconjugated

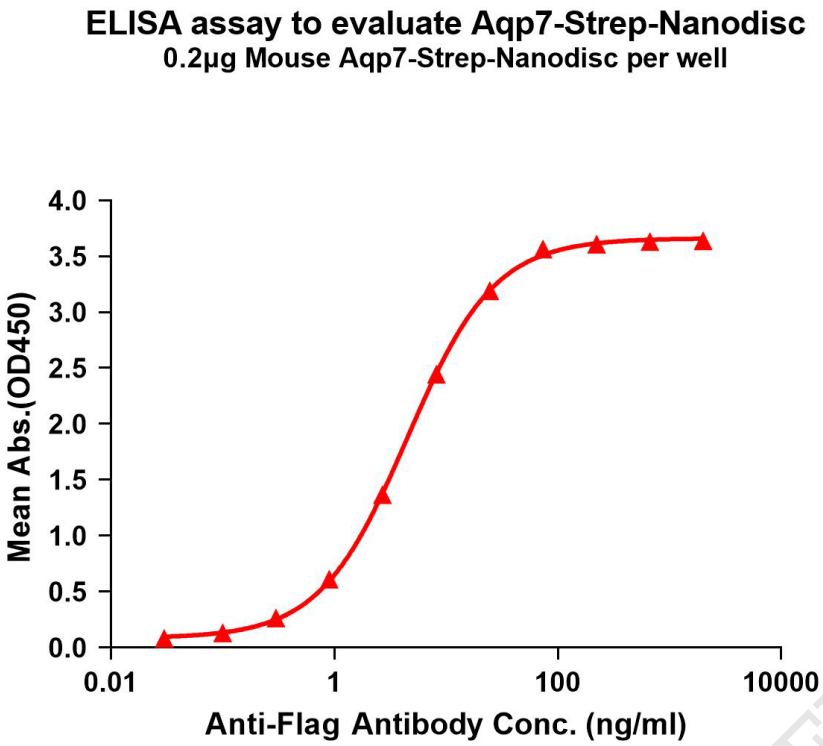

Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag Aqp7-Strep-Nanodisc (0.2μg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with Aqp7-Strep-nanodisc is 4.492ng/ml.

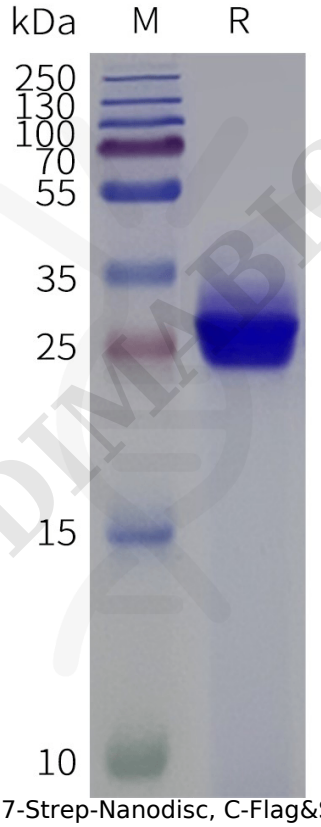

Figure 2. Mouse Aqp7-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE