

Datasheet for ABIN7491535

**ADGRE5 Protein****2** Images[Go to Product page](#)

## Overview

Quantity:	100 µg
Target:	ADGRE5
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc

## Product Details

Purpose:	Human ADGRE5 full length protein-synthetic nanodisc
Characteristics:	Unlike other membrane scaffold protein (MSP) Nanodisc on the market, our synthetic Nanodisc can be prepared directly from the cells. The polymers used during this process have a dual function. It dissolves the cell membranes, like the detergent, and uses cellular phospholipids to form Nanodisc around the membrane proteins. The target protein embedded Nanodiscs can then be purified.

## Target Details

Target:	ADGRE5
Background:	This gene encodes a member of the EGF-TM7 subfamily of adhesion G protein-coupled receptors, which mediate cell-cell interactions. These proteins are cleaved by self-catalytic proteolysis into a large extracellular subunit and seven-span transmembrane subunit, which associate at the cell surface as a receptor complex. The encoded protein may play a role in cell adhesion as well as leukocyte recruitment, activation and migration, and contains multiple extracellular EGF-like repeats which mediate binding to chondroitin sulfate and the cell surface

## Target Details

---

complement regulatory protein CD55. Expression of this gene may play a role in the progression of several types of cancer. Alternatively spliced transcript variants encoding multiple isoforms with 3 to 5 EGF-like repeats have been observed for this gene. This gene is found in a cluster with other EGF-TM7 genes on the short arm of chromosome 19. [provided by RefSeq, Jun 2011]

---

Molecular Weight: The human full length ADGRE5 protein has a MW of 87.1 kDa

---

UniProt: [P48960](#)

## Application Details

---

Comment: Advantages of Synthetic Nanodiscs:

- Highly purified membrane proteins
- High solubility in aqueous solutions
- High stability
- Proteins are in a native membrane environment and remain biologically active
- No detergent and can be used for cell-based assays
- No MSP backbone proteins

Limitations of Synthetic Nanodiscs:

- Intolerant to acids and high concentrations of divalent metal ions

---

Restrictions: For Research Use only

## Handling

---

Format: Lyophilized

Buffer: 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: -20 °C,-80 °C

Storage Comment: 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.

---

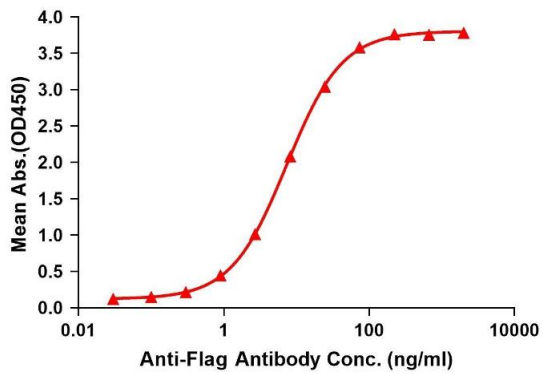
Expiry Date: 12 months



### SDS-PAGE

**Image 1.** Human AD-Nanodisc, Flag Tag on SDS-PAGE

**ELISA assay to evaluate ADGRE5-Nanodisc**  
0.2µg Human ADGRE5-Nanodisc per well



### ELISA

**Image 2.** Elisa plates were pre-coated with Flag Tag AD-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 AD-Nanodisc is 7.327 ng/mL.