PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Target	TAAR1
Synonyms	TA1; TAR1; TRAR1
Description	Human BRIL-TAAR1-Strep full length protein-synthetic nanodisc
Delivery	In Stock
Uniprot ID	Q96RJ0
Expression Host	HEK293
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	Neuroactive ligand-receptor interaction
Molecular Weight	The human full length BRIL-TAAR1-Strep protein has a MW of 50.0 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. 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.
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 activated by trace amines. The encoded protein responds little or not at all to dopamine, serotonin, epinephrine, or histamine, but responds well to beta-phenylethylamine, p-tyramine, octopamine, and tryptamine. While primarily functioning in neurologic systems, there is evidence that this protein is involved in blood cell and immunologic functions as well. The BRIL sequence was added to the N-terminal of TAAR1 to enhance receptor stability. BRIL is thermostabilized apocytochrome b562 with mutations M7W, H102I, R106L, PDB ID 1M6T.
Usage	Research use only
Conjugate	Unconjugated

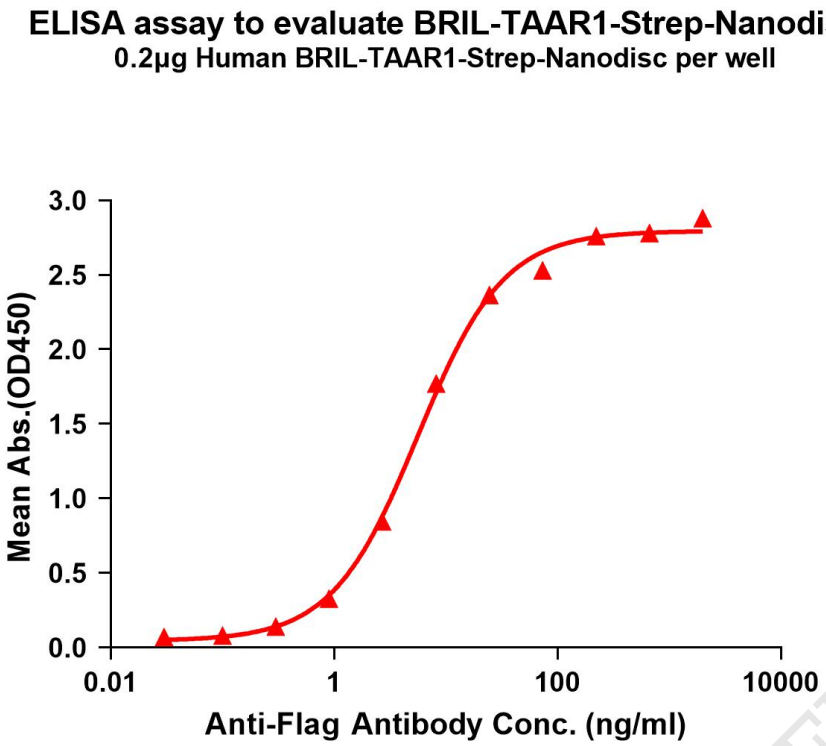

Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag BRIL-TAAR1-Strep-Nanodisc (0.2μg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with BRIL-TAAR1-Strep-Nanodisc is 5.628ng/ml.

Figure 2. Human BRIL-TAAR1-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE