

HUMAN NRG1 PROTEIN, HFC TAG

Cat.#: 11763

Product Name: Human NRG1 Protein

Size: 10 µg, 50 µg and 100 µg

Synonyms: ARIA;GGF;GGF2;HGL;HRG;HRG1;HRGA;MST131;MSTPI31;NDF;NRG1-IT2;SMDF

Target: NRG1

UNIPROT ID: Q02297

Description: Recombinant human NRG1 Protein with C-terminal Human Fc tag

Background: The protein encoded by this gene is a membrane glycoprotein that mediates cell-cell signaling and plays a critical role in the growth and development of multiple organ systems. An extraordinary variety of different isoforms are produced from this gene through alternative promoter usage and splicing. These isoforms are expressed in a tissue-specific manner and differ significantly in their structure, and are classified as types I, II, III, IV, V and VI. Dysregulation of this gene has been linked to diseases such as cancer, schizophrenia, and bipolar disorder (BPD).

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 50.3 kDa after removal of the signal peptide. The apparent molecular mass of NRG1-hFc is approximately 55-70 kDa due to glycosylation.

Molecular Characterization: NRG1 (Ser20-Arg242) hFc(Glu99-Ala330)

Purity: The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

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.

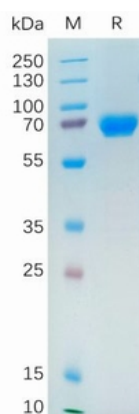


Figure 1. Human NRG1 Protein, hFc Tag on SDS-PAGE under reducing condition.

Human NRG1, hFc tagged protein ELISA

0.5 µg of Human Her3, His tagged protein per well

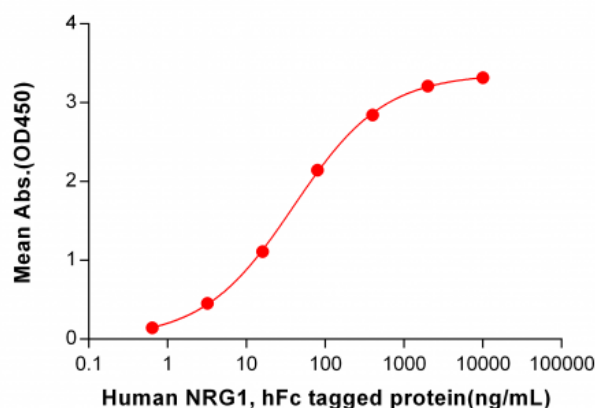


Figure 2. ELISA plate pre-coated by 2 µg/ml (100 µl/well) Human HER3, His tagged protein 11208 can bind Human NRG1, hFc tagged protein (11763) in a linear range of 3.2-400 ng/ml.