

Growth Factor Data Sheet

GoldBio growth factors are manufactured for **RESEARCH USE ONLY** and cannot be sold for human consumption!

Neuritin (NRN1) is a GPI-anchored neurotrophic factor, which is expressed in response to induction of neuronal activity by GDNF, BDNF, NT3 and other neural stimulators. It promotes neurite outgrowth and especially branching of neuritic processes in primary hippocampal and cortical cells. NRN1 also promotes angiogenesis. During early brain development, NRN1 inhibits apoptosis of cortical progenitors by preventing activation of caspase 3. Recombinant human neuritin is a covalently disulfide-linked homodimer, consisting of two 9.7 kDa polypeptide monomers, each containing 88 amino acid residues.

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| Catalog Number | 1170-22 |
| Product Name | NRN1, Human Recombinant Human Neuritin 1 (NRN1) Neuritin (NRN) Candidate Plasticity Gene 15 (CPG15) |
| Source | <i>Escherichia coli</i> |
| MW | ~19.4 kDa (2x 88 amino acids) |
| Sequence | AGKCDAVFKG FSDCLLKG SMANYPQGLD DKTNIKTVCT YWEDFHSTV TALTDCQEGA KDMWDKLRKE SKNLNIQGSF FELCGSGN |
| Accession Number | Q9NPD7 |
| Purity | >97% by SDS-PAGE and HPLC analyses |
| Biological Activity | Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using rat C6 cells is less than 25 ng/ml, corresponding to a specific activity of >4.0×10 ⁴ IU/mg. |
| Formulation | Sterile filtered white lyophilized powder. Purified and tested for use in cell culture. |
| Storage/Handling | This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles. |
| Reconstitution | The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum. |