

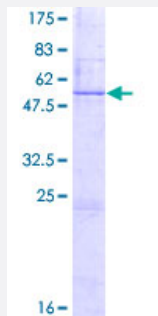
Full-Length

BDNF (Human) Recombinant Protein (P02)

Catalog # H00000627-P02

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human BDNF full-length ORF (NP_733927.1, 1 a.a. - 255 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MFHQVRRVMTILFLTMVISYFGCMKAAPMKEANIRGQGGLAYPGVIRTHGTLESVNGPKAGSRGLT
SLADTFEHVIEELLEDQKVRPNEENNKDADLYTSRVMSSQVPLEPPLFLLEEYKNYDAANM
SMRVRRHSDPARRGELSVCDSEWVTAADKKTAVDMSGGTVTVLEKVPVSKGQLKQYFETK
CNPMGYTKEGCRGIDKRHWNSQCRTTQSYVRALTMDSKKRIGWRFIRIDTSCVCTLTIKRGR

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

55.3

Interspecies Antigen Sequence

Mouse (97); Rat (97)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — BDNF

Entrez GeneID [627](#)

GeneBank Accession# [NM_170731.3](#)

Protein Accession# [NP_733927.1](#)

Gene Name BDNF

Gene Alias MGC34632

Gene Description brain-derived neurotrophic factor

Omim ID [113505](#) [164230](#) [209880](#) [606788](#) [607499](#)

Gene Ontology [Hyperlink](#)

Gene Summary The protein encoded by this gene is a member of the nerve growth factor family. It is induced by cortical neurons, and is necessary for survival of striatal neurons in the brain. Expression of this gene is reduced in both Alzheimer's and Huntington disease patients. This gene may play a role in the regulation of stress response and in the biology of mood disorders. Multiple transcript variants encoding distinct isoforms have been described for this gene. [provided by RefSeq]

Other Designations neurotrophin

Publication Reference

- [Intrathecal Delivery of BDNF into the Lumbar Cistern Re-Engages Locomotor Stepping after Spinal Cord Injury.](#)

Francesca Marchionne, Alexander J Krupka, George M Smith, Michel A Lemay.

IEEE Transactions on Neural Systems and Rehabilitation Engineering 2020 Nov; 28(11):2459.

Application: Func, Cat, Cat lumbar cistern, Cat spinal cord

- [Convection enhanced drug delivery of BDNF through a microcannula in a rodent model to strengthen connectivity of a peripheral motor nerve bridge model to bypass spinal cord injury.](#)

Martin Bauknight W, Chakrabarty S, Hwang BY, Malone HR, Joshi S, Bruce JN, Sander Connolly E, Winfree CJ, Cunningham MG, Martin JH, Haque R.

Journal of Clinical Neuroscience 2012 Apr; 19(4):563.

Application: ELISA, IHC, WB, Rat, Spinal cord

Pathway

- [MAPK signaling pathway](#)
- [Neurotrophin signaling pathway](#)

Disease

- [Agoraphobia](#)
- [Akathisia](#)
- [Alcoholism](#)
- [Alzheimer disease](#)
- [Amnesia](#)
- [Amphetamine-Related Disorders](#)
- [Angina](#)
- [Anorexia](#)
- [Anorexia Nervosa](#)
- [Anoxia](#)
- [Anxiety Disorders](#)

- [Arousal](#)
- [Asperger Syndrome](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Atrophy](#)
- [Attention](#)
- [Attention Deficit Disorder with Hyperactivity](#)
- [Autistic Disorder](#)
- [Avoidance Learning](#)
- [Basal Ganglia Diseases](#)
- [Bipolar Disorder](#)
- [Birth Weight](#)
- [Body Weight](#)
- [Borderline Personality Disorder](#)
- [Brain Injuries](#)
- [Brain Ischemia](#)
- [Bulimia](#)
- [Bulimia Nervosa](#)
- [Cardiovascular Diseases](#)
- [Cerebral Infarction](#)
- [Cerebrovascular Accident](#)
- [Chromosome Aberrations](#)
- [Chronic Disease](#)
- [Cognition](#)
- [Cognition Disorders](#)
- [Conditioning](#)

- [Conditioning \(Psychology\)](#)
- [Coronary Artery Disease](#)
- [Cues](#)
- [Decision Making](#)
- [Depression](#)
- [Depressive Disorder](#)
- [Dermatitis](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Discrimination \(Psychology\)](#)
- [Disease Models](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Dominance](#)
- [Dyskinesia](#)
- [Dysthymic Disorder](#)
- [Dystonic Disorders](#)
- [Eating Disorders](#)
- [Edema](#)
- [Electroconvulsive Therapy](#)
- [Epilepsies](#)
- [Epilepsy](#)
- [Executive Function](#)
- [Extinction](#)
- [Failure to Thrive](#)
- [Fragile X syndrome](#)

- [Functional Laterality](#)
- [Galvanic Skin Response](#)
- [Gambling](#)
- [Genetic Predisposition to Disease](#)
- [Genetics](#)
- [Granuloma](#)
- [Hallucinations](#)
- [Headache](#)
- [Heroin Dependence](#)
- [Huntington disease](#)
- [Hypercholesterolemia](#)
- [Hyperphagia](#)
- [Hypertension](#)
- [Inhibition \(Psychology\)](#)
- [Intelligence Tests](#)
- [Intervertebral Disk Displacement](#)
- [Learning](#)
- [Leukoencephalopathies](#)
- [Lewy Body Disease](#)
- [Lupus Erythematosus](#)
- [Lupus Vasculitis](#)
- [Memory](#)
- [Memory Disorders](#)
- [Mental Disorders](#)
- [Mental Processes](#)
- [Mental Recall](#)

- [Mental Retardation](#)
- [Mental Status Schedule](#)
- [Mercury Poisoning](#)
- [Metabolic Syndrome X](#)
- [Migraine Disorders](#)
- [Mitral Valve Prolapse](#)
- [MMPI](#)
- [Mood Disorders](#)
- [Motor Skills](#)
- [Multiple Sclerosis](#)
- [Multiple System Atrophy](#)
- [Myopia](#)
- [NARP](#)
- [Neoplasms](#)
- [Neuropsychological Tests](#)
- [Neurotic Disorders](#)
- [Obesity](#)
- [Obsessive-Compulsive Disorder](#)
- [Obstetric Labor Complications](#)
- [Opioid-Related Disorders](#)
- [Orientation](#)
- [Osteoporosis](#)
- [Ovarian Failure](#)
- [Overweight](#)
- [Pain](#)
- [Panic Disorder](#)

- [Paranoid Disorders](#)
- [Parkinson disease](#)
- [Parkinsonian Disorders](#)
- [Pattern Recognition](#)
- [Perception](#)
- [Personality Assessment](#)
- [Personality Disorders](#)
- [Personality Inventory](#)
- [Personality Tests](#)
- [Pick Disease of the Brain](#)
- [Polycystic Ovary Syndrome](#)
- [Polyradiculoneuropathy](#)
- [Postmortem Changes](#)
- [Prenatal Exposure Delayed Effects](#)
- [Problem Solving](#)
- [Psychiatric Status Rating Scales](#)
- [Psychoacoustics](#)
- [Psychological Tests](#)
- [Psychometrics](#)
- [Psychomotor Performance](#)
- [Psychoses](#)
- [Psychotic Disorders](#)
- [Puberty](#)
- [Reaction Time](#)
- [Recognition \(Psychology\)](#)

- [Recurrence](#)
- [Rett syndrome](#)
- [Reward](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)
- [Schizotypal Personality Disorder](#)
- [Sciatica](#)
- [Seizures](#)
- [Serial Learning](#)
- [Sleep Apnea](#)
- [Sleep Disorders](#)
- [Social Perception](#)
- [Startle Reaction](#)
- [Stress](#)
- [Stress Disorders](#)
- [Stroke](#)
- [Subarachnoid Hemorrhage](#)
- [Substance-Related Disorders](#)
- [Syndrome](#)
- [Thinking](#)
- [Thrombophilia](#)
- [Tic Disorders](#)
- [Tobacco Use Disorder](#)
- [Torticollis](#)
- [Tourette Syndrome](#)
- [Verbal Learning](#)

- [Wechsler Scales](#)
- [Weight Gain](#)
- [Weight Loss](#)
- [Werner syndrome](#)