Neurogenic Differentiation Factor 2 (NEUROD2) Mouse Recombinant Protein

PRODUCT OVERVIEW

Product Name	Neurogenic differentiation factor 2 (Neurod2), Recombinant Protein
Full Product Name	Recombinant Mouse Neurogenic differentiation factor 2 (Neurod2)
Product Gene Name	Neurod2 recombinant protein
Product Synonym Gene Name	Neurod2
Sequence	MLTRLFSEPG LLSDVPKFAS WGDGDDDEPR SDKGDAPPQP PPAPGSGAPG PARAAKPVSL RGGEEIPEPT LAEVKEEGEL GGEEEEEEEE EEGLDEAEGE RPKKRGPKKR KMTKARLERS KLRRQKANAR ERNRMHDLNA ALDNLRKVVP CYSKTQKLSK IETLRLAKNY IWALSEILRS GKRPDLVSYV QTLCKGLSQP TTNLVAGCLQ LNSRNFLTEQ GADGAGRFHG SGGPFAMHPY PYPCSRLAGA QCQAAGGLGG GAAHALRTHG YCAAYETLYA AAGGGGASPD YNSSEYEGPL SPPLCLNGNF SLKQDSSPDH EKSYHYSMHY SALPGSRPTG HGLVFGSSAV RGGVHSENLL SYDMHLHHDR GPMYEELNAF FHN
Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)
Preparation and Storage	Store at -20 degrees C. For long-term storage, store at -20 degrees C or -80 degrees C. Store working aliquots at 4 degrees C for up to one week. Repeated freezing and thawing is not recommended.
Molecular Weight	41,493 Da
Sequence Positions	1-383, full length protein
Tag Information	This protein contains an N-terminal tag and may also contain a C-terminal tag. Tag types are determined by various factors including tag-protein stability, please inquire for tag information.
Sterility	Sterile filter available upon request.
Endotoxin	Low endotoxin available upon request.
3D Structure	ModBase 3D Structure for Q62414
Species	Mouse
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for Neurod2 recombinant protein	This gene encodes a member of the neuroD family of neurogenic basic helix-loop-helix (bHLH) proteins. Expression of this gene can induce transcription from neuron-specific promoters, such as the GAP-43 promoter, which contain a specific DNA sequence known as an E-box. The product of the human gene can induce neurogenic differentiation in non-neuronal cells in Xenopus embryos, and is thought to play a role in the determination and maintenance of neuronal cell fates.
Other Notes	Small volumes of Neurod2 recombinant protein vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for Neurod2 purchase	MBS1330625 is a recombinant protein targeting Neurod2. Also known as Recombinant Mouse Neurogenic differentiation factor 2 (Neurod2). Host: E Coli or Yeast or Baculovirus or Mammalian Cell.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for Neurod2. It may not necessarily be applicable to this product.

NCBI GI #	157266290
NCBI GeneID	18013
NCBI Accession #	NP_035025.3
UniProt Primary Accession #	Q62414
UniProt Secondary Accession #	Q61952; Q925V5
UniProt Related Accession #	Q62414
GenBank Nucleotide #	NM_010895.3
NCBI Official Full Name	neurogenic differentiation factor 2
NCBI Official Synonym Full Names	neurogenic differentiation 2
NCBI Official Symbol	Neurod2
NCBI Official Synonym Symbols	Ndrf; bHLHa1
UniProt Protein Name	Neurogenic differentiation factor 2
UniProt Synonym Protein Names	NeuroD-related factor; NDRF
Protein Family	Neurogenic differentiation factor
UniProt Gene Name	Neurod2
UniProt Synonym Gene Names	Ndrf; NeuroD2; NDRF
NCBI Protein Information	neurogenic differentiation factor 2
UniProt Comments for Neurod2	Transcriptional regulator implicated in neuronal determination. Mediates calcium-dependent transcription activation by binding to E box-containing promoter. Critical factor essential for the repression of the genetic program for neuronal differentiation; prevents the formation of synaptic vesicle clustering at active zone to the presynaptic membrane in postmitotic neurons. Induces transcription of ZEB1, which in turn represses neuronal differentiation by down-regulating REST expression. Plays a role in the establishment and maturation of thalamocortical connections; involved in the segregation of thalamic afferents into distinct barrel domains within layer VI of the somatosensory cortex. Involved in the development of the cerebellar and hippocampal granular neurons, neurons in the basolateral nucleus of amygdala and the hypothalamic-pituitary axis. Associates with chromatin to the DPYSL3 E box-containing promoter.
Research Articles on Neurod2	**1.** Using genome-wide, mRNA-based microarray analysis, study found that NeuroD2 is actually one of hundreds of genes whose mRNA levels are suppressed by synaptic activity, in a manner dependent upon N-methyl d-aspartate receptor (NMDAR) activation. Study confirmed this observation both in vitro and in vivo and provide evidence that this happens at the level of transcription and not mRNA stability.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.

Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/recombinant-protein/neurogenic-differentiation-factor-2-neurod2/1330625