

PRODUCT INFORMATION

Product name : NEUROD2 antibody

Product type : Primary antibodies

Description : Rabbit polyclonal to NEUROD2

Immunogen : 3 synthetic peptides (human) conjugated to KLH

Reacts with : Human, Mouse

Tested applications : ELISA, WB

GENE INFORMATION

Gene Symbol : NEUROD2

Gene Name : neurogenic differentiation 2

Ensembl ID : ENSG00000171532

Entrez GeneID : 4761

GenBank Accession number : U58681

Omim ID : 601725

Swiss-Prot : Q15784

Molecular weight of NEUROD2 : 41.3kDa

Function : 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

Expected subcellular localization : Nucleus

Summary : 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. [provided by RefSeq, Jul 2008]

APPLICATION NOTE

Recommended dilution :

- **ELISA:** Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A minimum titer of 1/20000 is determined. Appropriate specificity controls were run.
- **WB:** 1/5000.

Optimal dilutions/concentration should be determined by the end user.

Raised in : Rabbit

Clonality : Polyclonal

Isotype : IgG

Purity : Purified Antibody

Storage buffer : 0.5 X PBS, 50% glycerol containing a final concentration of 0.1% BSA and 0.01% Thimerosal.

Form : Liquid

Storage instruction : Store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

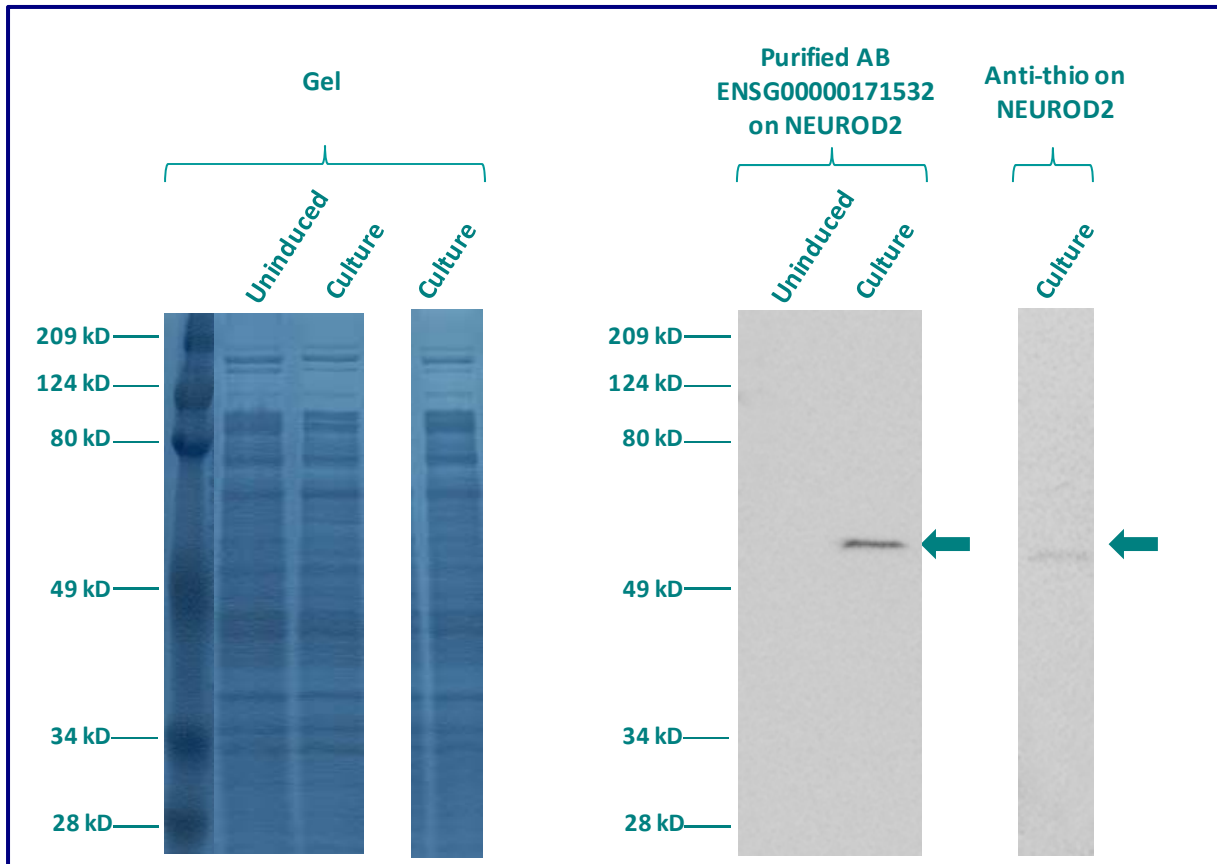
WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000171532 has been tested at 1/5000 on uninduced (negative control) and induced culture of E.coli (one shot Top10 competent cells).

An anti-thio has been tested at 1/5000 on induced culture of E.coli (one shot Top10 competent cells) as a positive control.

Plasmid name : pBAD-DEST49.

Molecular weight of NEUROD2 : 55.4kDa (41.4kDa + another 14kDa for the tag).



Gel concentration: 10%

Blocking: in 5% non-fat milk-PBST solution

1st Antibody: The antibodies are diluted in blocking buffer.

- Dilute the purified antibody ENSG00000171532 at 1: 5000
- Dilute the anti-thio at 1:5000

60 minutes of incubation

2nd Antibody: The antibody is diluted in blocking buffer.

- Dilute the anti-Rabbit IgG HRP conjugated at 1/10000
- 60 minutes of incubation