PRODUCT INFORMATION

Product name：NR2C2 antibody

Product type： Primary antibodies

Description： Mouse monoclonal to NR2C2

Immunogen：1 synthetic peptide (human) conjugated to KLH

Reacts with： Hu, Ms

Tested applications：ELISA, WB & IF

GENE INFORMATION

Gene Symbol：NR2C2

Gene Name：nuclear receptor subfamily 2, group C, member 2

Ensembl ID：ENSG00000177463

Entrez GeneID：7182

GenBank Accession number：L27586

Swiss-Prot：P49116

Molecular weight：67.3 & 65.4kDa

Function：Orphan nuclear receptor that can act as a repressor or activator of transcription. An important repressor of nuclear recptor signaling pathways such as retinoic acid receptor, retinoid X, vitamin D3 receptor, thyroid hormone receptor and estrogen receptor pathways. May regulate gene expression during the late phase of spermatogenesis. Together with NR2C1, forms the core of the DRED (direct repeat erythroid-definitive) complex that represses embryonic and fetal globin transcription including that of GATA1. Binds to hormone response elements (HREs) consisting of two 5'-AGGTCA-3' half site direct repeat consensus sequences. Plays a fundamental role in early embryonic development and embryonic stem cells. Required for normal spermatogenesis and cerebellum development. Appears to be important for neurodevelopmentally regulated behavior. Activates transcriptional activity of LHCG. Antagonist of PPARA-mediated transactivation.

Expected subcellular localization：Nucleus.

Summary：Members of the nuclear hormone receptor family, such as NR2C2, act as ligand-activated transcription factors. The proteins have an N-terminal transactivation domain, a central DNA-binding domain with 2 zinc fingers, and a ligand-binding domain at the C terminus. The activated receptor/ligand complex is translocated to the nucleus where it binds to hormone response elements of target genes (Yoshikawa et al., 1996 [PubMed 8661150]).[supplied by OMIM, Mar 2008]

APPLICATION NOTE

Recommended dilution：

- **ELISA: Antibody specificity was verified by direct ELISA against the 1 immunogen peptide. A titer of 35000 has been determined. Appropriate specificity controls were run.**
- **WB: Dilution 1/5000**
- **IF: Dilution 1/500**

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

Raised in：Mouse

Clonality：Monoclonal

Isotype：IgG

Purity：Purified Antibody

Concentration: 2mg/ml

Storage buffer： Containing a final concentration of PBS/glycerol (V/V), 0.1% BSA and 0.01% Thimerosal.

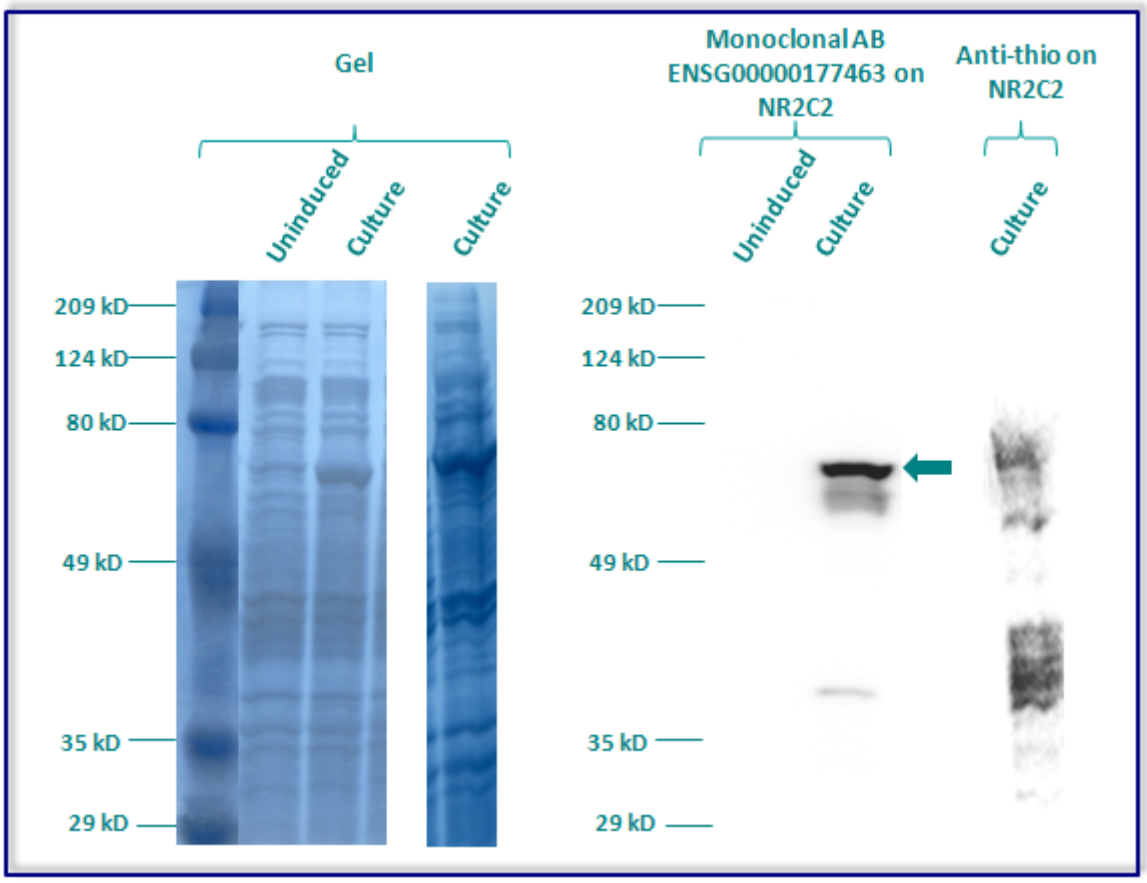
Form：Liquid

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

WESTERN BLOT ON RECOMBINANT PROTEIN

The purified monoclonal antibody ENSG00000177463 has been diluted and tested at 1/5000 on uninduced (negative control) and induced cultures of E.coli (one shot Top10 competent cells).
An anti-thio (positive control) has been tested at 1/5000 on induced culture of E.coli (one shot Top10 competent cells) as a positive control.

Clone : 3B10G11E11, Isotype : G1; kappa
Plasmid name : pBAD-DEST49.
Molecular weight of NR2C2 : 79.4kDa (65.4kDa + 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 ENSG00000177463 at 1:5000**
- **Dilute the anti-thio at 1:5000**

60 minutes of incubation
2nd Antibody: The antibody is diluted in blocking buffer.

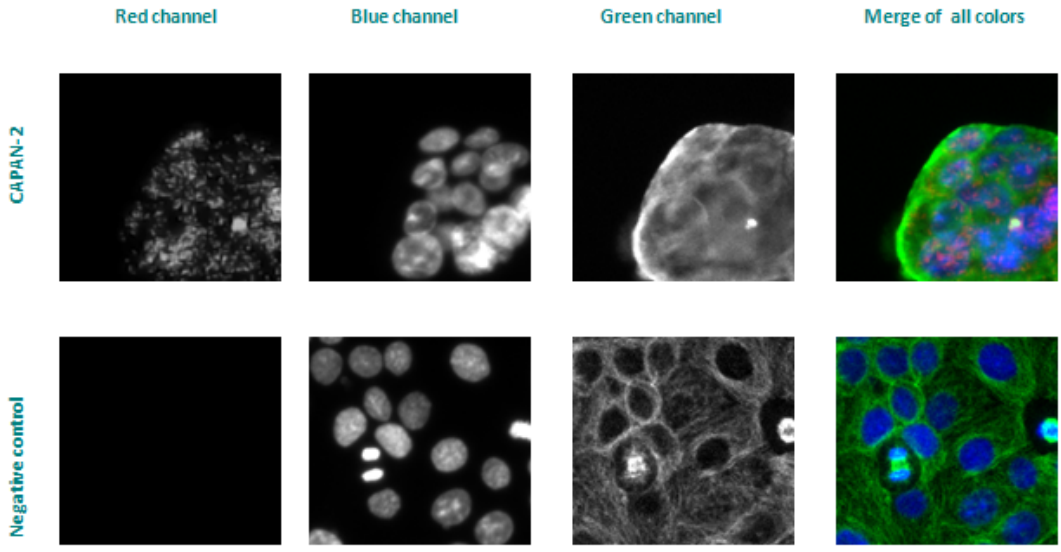
- **Dilute the anti-Mouse IgG HRP conjugated at 1/10000**

60 minutes of incubation

IMMUNOFLUORESCENCE ANALYSIS

Immunofluorescence analysis of Nuclear receptor subfamily 2 group C member 2 (NR2C2) expression in 1 cell line (Capan-2). The monoclonal antibody ENSG00000177463 has been tested at 1/500.

Green staining : cytoskeleton (microtubules/α-tubuline)
Blue staining : nucleus (Hoechst)
Red staining : anti- NR2C2 antibody (purified)
Expected subcellular location : Nucleus



The different images obtained by double labeling immunofluorescence microscopy of CAPAN- 2 (Pancreas adenocarcinoma) cell line shows that NR2C2 is a nuclear protein detected in this cellular tissue.

Pictures are compared with a negative control from the same cell line without primary Ab.