PRODUCT INFORMATION

Product name： YY1 antibody

Product type： Primary antibodies

Description： Rabbit polyclonal to YY1

Immunogen： 3 synthetic peptides (human) conjugated to KLH

Reacts with： Human, Mouse

Tested applications： ELISA, WB and IF

GENE INFORMATION

Gene Symbol： YY1

Gene Name： YY1 transcription factor

Ensembl ID： ENSG00000100811

Entrez GeneID： 7528

GenBank Accession number： BC020324

Omim ID： 600013

Swiss-Prot： P25490

Molecular weight of YY1： 44.7kDa

Function： Multifunctional transcription factor that exhibits positive and negative control on a large number of cellular and viral genes by binding to sites overlapping the transcription start site. May play an important role in development and differentiation. The function of YY1 as an activator or a repressor is specified by the presence of other proteins. For example it acts as a repressor in absence of adenovirus E1A protein but as an activator in its presence.

Expected subcellular localization： Nucleus matrix. Note: Associated with the nuclear matrix.

Summary： YY1 is a ubiquitously distributed transcription factor belonging to the GLI-Kruppel class of zinc finger proteins. The protein is involved in repressing and activating a diverse number of promoters. YY1 may direct histone deacetylases and histone acetyltransferases to a promoter in order to activate or repress the promoter, thus implicating histone modification in the function of YY1 [provided by RefSeq].

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.**
- **IF: 1/1000.**

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, containing a final concentration of 50% Glycerol, 0.1% BSA and 0.01% Thimerosal.

Form：Liquid

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

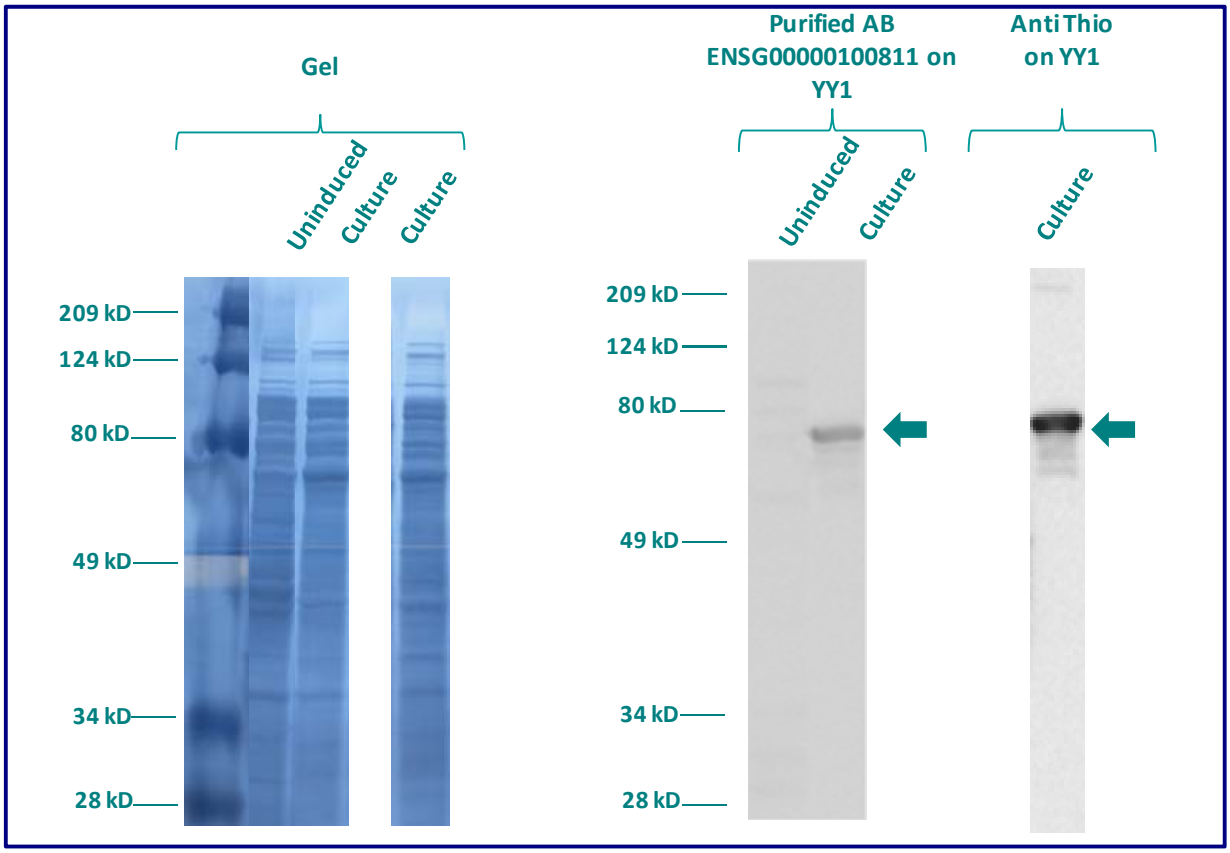
WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000100811 has been tested at 1/10000 on uninduced (negative control) and induced culture of E.coli (one shot Top10 competent cells).

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

Plasmid name： pBAD-DEST49.

Molecular weight of YY1：58.7kDa (44.7kDa + 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 ENSG00000100811 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

IMMUNOFLUORESCENCE ANALYSIS

Immunofluorescence analysis of Transcriptional repressor protein YY1 (YY1) expression in 6 cells lines (HELA, 293T/17, Capan-2, SAOS-2, SH-SY5Y, Skin 3.44). The purified Antibody ENSG00000100811 has been tested at 1/1000.

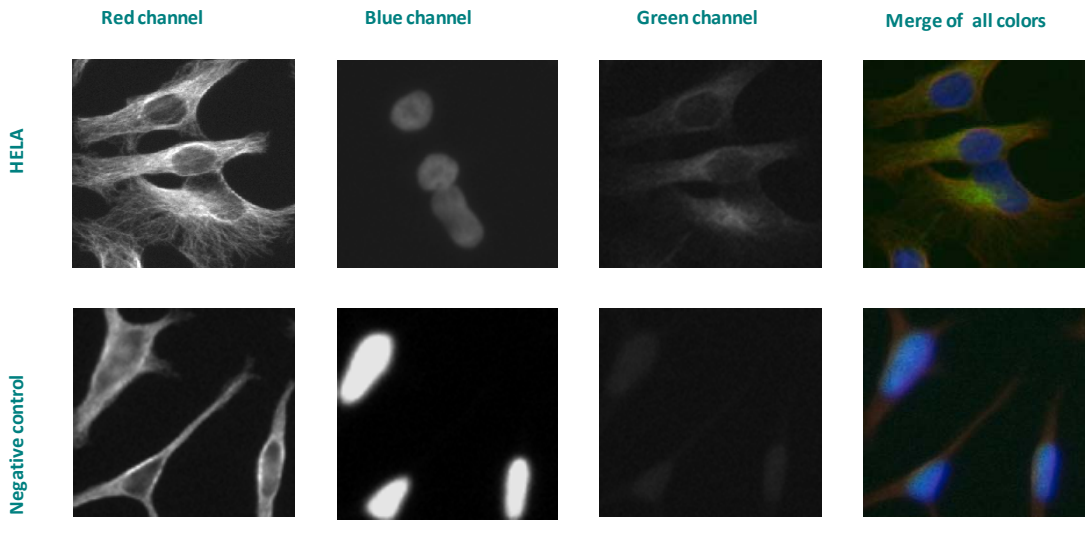
Red staining : cytoskeleton (microtubules/α-tubuline)

Blue staining : nucleus (Hoechst)

Green staining : anti- YY1 antibody (purified)

Expected subcellular location : Nucleus matrix.

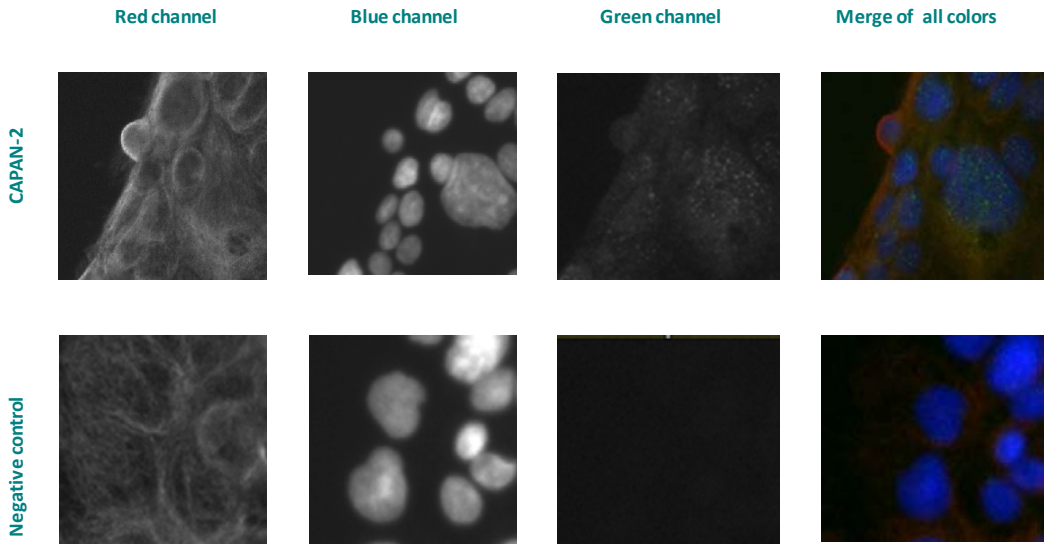
Note: Associated with the nuclear matrix



The different images obtained by double labeling immunofluorescence microscopy of HELA (cervix adenocarcinoma) cell line shows that YY1 is a cytoplasmic protein detected in this cellular tissue.

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

Skin 3.44 cell line tested gave the same distribution of this protein



The different images obtained by double labeling immunofluorescence microscopy of CAPAN- 2 (Pancreas adenocarcinoma) cell line shows that YY1 is a nuclear protein detected in this cellular tissue.

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

Remaining cell lines tested gave a positive results with the same distribution