

## PRODUCT INFORMATION

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**Product name :** GRLF1 antibody

**Product type :** Primary antibodies

**Description :** Mouse monoclonal to GRLF1

**Immunogen :** 1 synthetic peptide (human) conjugated to KLH

**Reacts with :** Hu, Ms

**Tested applications :** ELISA, WB & IF

## GENE INFORMATION

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**Gene Symbol :** GRLF1

**Gene Name :** Rho GTPase activating protein 35

**Ensembl ID :** ENSG00000160007

**Entrez GeneID :** 2909

**GenBank Accession number :** M73077

**Swiss-Prot :** Q9NRY4

**Molecular weight :** 170.5kDa

**Function :** Represses transcription of the glucocorticoid receptor by binding to the cis-acting regulatory sequence 5'-GAGAAAAGAACTGGAGAACTC-3'. May participate in the regulation of retinal development and degeneration. May transduce signals from p21-ras to the nucleus, acting via the ras GTPase-activating protein (GAP). May also act as a tumor suppressor.

**Expected subcellular localization :** Cytoplasm. Nucleus.

**Summary :** The human glucocorticoid receptor DNA binding factor, which associates with the promoter region of the glucocorticoid receptor gene (hGR gene), is a repressor of glucocorticoid receptor transcription. The amino acid sequence deduced from the cDNA sequences show the presence of three sequence motifs characteristic of a zinc finger and one motif suggestive of a leucine zipper in which 1 cysteine is found instead of all leucines. The GRLF1 enhances the homologous down-regulation of wild-type hGR gene expression. Biochemical analysis suggests that GRLF1 interaction is sequence specific and that transcriptional efficacy of GRLF1 is regulated through its interaction with specific sequence motif. The level of expression is regulated by glucocorticoids. [provided by RefSeq, Jul 2008]

## **APPLICATION NOTE**

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### **Recommended dilution :**

- **ELISA:** Antibody specificity was verified by direct ELISA against the 1 immunogen peptide. A titer of 8000 has been determined. Appropriate specificity controls were run.
- **WB:** Dilution 1/5000
- **IF:** Dilution 1/50

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

**Raised in :** Mouse

**Clonality :** Monoclonal

**Isotype :** IgG

**Purity :** Purified Antibody

**Concentration:** 0.5mg/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 monoclonal purified antibody ENSG00000160007 has tested at 1/5000 on uninduced (negative control) and induced culture of E.coli (one shot Top10 competent cells).

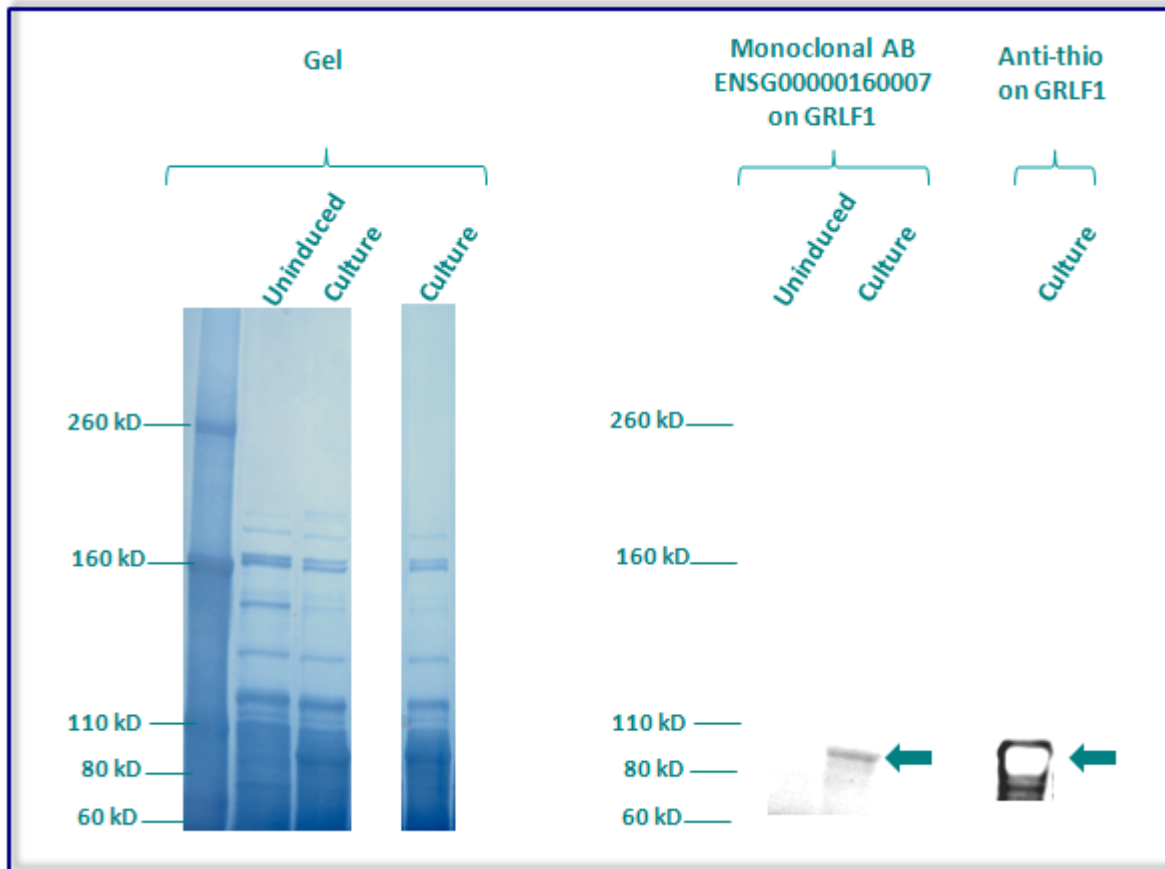
An anti-thio has been tested at 1/5000 on induced culture of E.coli (one shot Top10 competent cells) as a positive control.

Clone : 1G1D12, Isotype : G1; kappa

Plasmid name : pBAD-DEST49.

Molecular weight of GRLF1 : 100.3kDa (86.3kDa + another 14kDa for the tag).

Note: The size of the recombinant protein produced by the GRLF1 clone was 86.3kDa and not the 170.5kDa of the endogenous protein.



Gel concentration: 5%

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

1<sup>st</sup> Antibody: The antibodies are diluted in blocking buffer.

- Dilute the purified antibody ENSG00000160007 at 1:5000
- Dilute the anti-thio at 1:5000

60 minutes of incubation

2<sup>nd</sup> Antibody: The antibody is diluted in blocking buffer.

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

## IMMUNOFLUORESCENCE ANALYSIS

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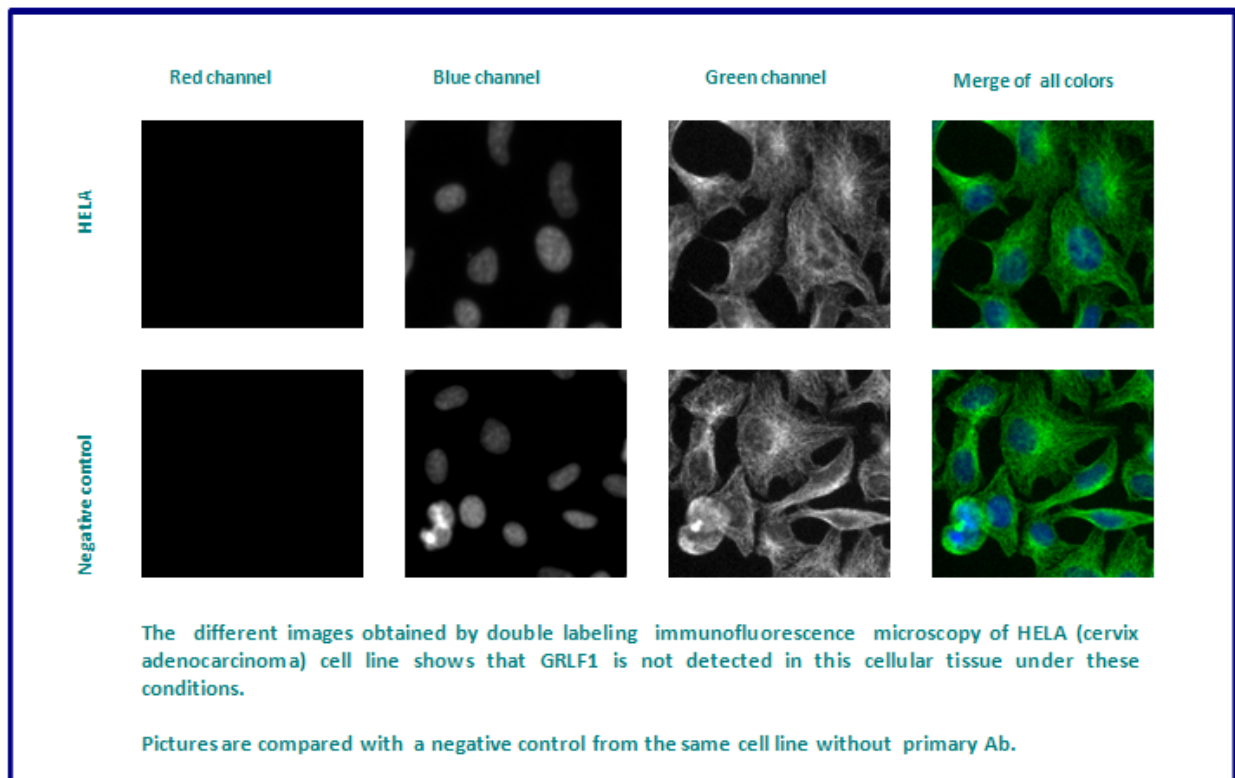
Immunofluorescence analysis of Rho GTPase-activating protein 35 (GRLF1) expression in 6 cells lines (HELA, 293T/17, Capan-2, SAOS-2, SH-SY5Y, Skin 3,44). The monoclonal antibody ENSG00000160007 has been tested at 1/50.

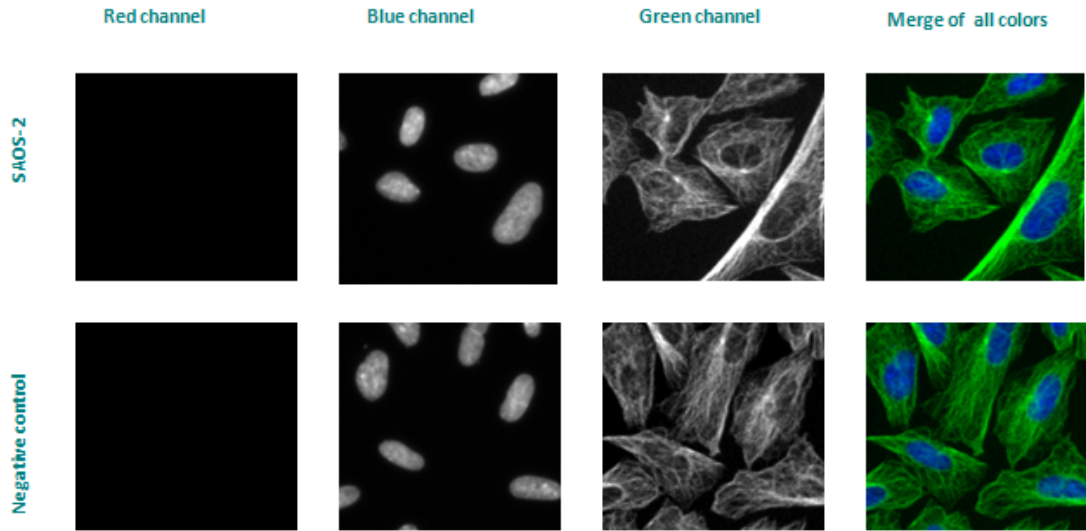
**Green staining** : cytoskeleton (microtubules/ $\alpha$ -tubuline)

**Blue staining** : nucleus (Hoechst)

**Red staining** : anti- GRLF1 antibody (purified)

**Expected subcellular location** : Cytoplasm. Nucleus





The different images obtained by double labeling immunofluorescence microscopy of SAOS-2 (osteosarcoma) cell line shows that GRLF1 is not detected in this cellular tissue under these conditions.

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

Remaining cell lines tested gave a negative results under these conditions.