PRODUCT INFORMATION

Product name： ERRFI1 antibody

Product type： Primary antibodies

Description： Rabbit polyclonal to ERRFI1

Immunogen： 3 synthetic peptides (human) conjugated to KLH

Reacts with： Human, Mouse

Tested applications： ELISA, WB & IF

GENE INFORMATION

Gene Symbol： ERRFI1

Gene Name： ERBB receptor feedback inhibitor 1

Ensembl ID： ENSG00000116285

Entrez GeneID： 54206

GenBank Accession number： BC025337

Swiss-Prot： Q9UJM3

Molecular weight of ERRFI1： 53.2kDa

Function： Negative regulator of EGFR signaling in skin morphogenesis. Acts as a negative regulator for several EGFR family members, including ERBB2, ERBB3 and ERBB4. Inhibits EGFR catalytic activity by interfering with its dimerization. Inhibits autophosphorylation of EGFR, ERBB2 and ERBB4. Important for normal keratinocyte proliferation and differentiation. Plays a role in modulating the response to steroid hormones in the uterus. Required for normal response to progesterone in the uterus and for fertility. Mediates epithelial estrogen responses in the uterus by regulating ESR1 levels and activation. Important for regulation of endometrium cell proliferation. Important for normal prenatal and perinatal lung development.

Expected subcellular localization： Cytoplasm. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Nucleus. Note: Associated with the plasma membrane of basal skin keratinocytes. Translocates into the nucleus of differentiating suprabasal keratinocytes**Expected tissue specificity：** Expressed in epididymis (at protein level).

Summary： ERRFI1 is a cytoplasmic protein whose expression is upregulated with cell growth (Wick et al., 1995 [PubMed 7641805]). It shares significant homology with the protein product of rat gene-33, which is induced during cell stress and mediates cell

signaling (Makkinje et al., 2000 [PubMed 10749885]; Fiorentino et al., 2000 [PubMed 11003669]).[supplied by OMIM]

APPLICATION NOTE

Recommended dilution：

- **ELISA: Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A minimum titer of 1/40000 is determined for one of the three peptides. Appropriate specificity controls were run.**
- **WB: 1/500.**
- **IF: 1/500.**

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

Raised in： Rabbit

Clonality： Polyclonal

Isotype： IgG

Purity： Crude serum, final bleed

Storage buffer： Crude serum containing 0.1% Azide

Form： Liquid

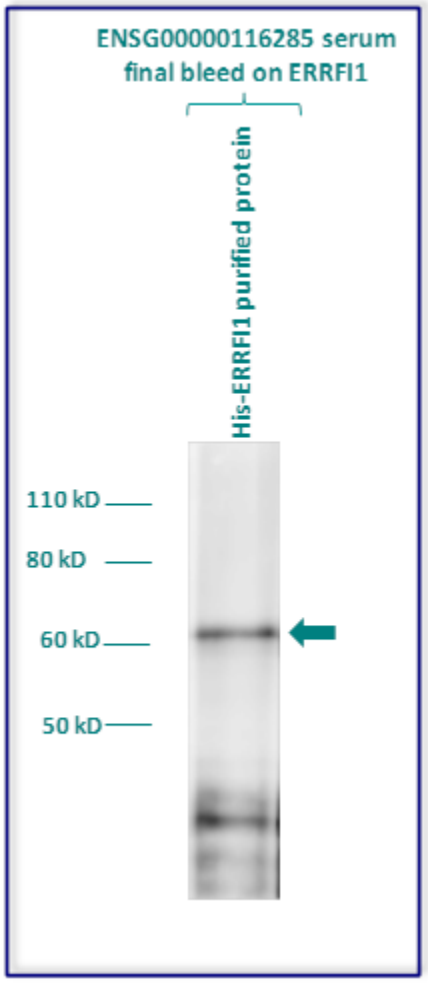
Storage instruction： Store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

WESTERN BLOT ON CELL LYSATE

The serum ENSG00000116285 has been tested at 1/1000 on His-ERRFI1 purified protein.

Plasmid name : pDEST17.

Molecular weight of ERRFI1 : 53.2kDa (50.6kDa + another 2.6kDa for the tag).



NOTE: THE PURIFIED ANTIBODY DOES NOT DETECT THE PROTEIN IN THE FOLLOWING CELL LYSATES (MCF2, KERATINOCYTES & HEK293) AT A DILUTION OF 1:500

Gel concentration: 10%
Blocking: in 5% non-fat milk-PBST solution
1st Antibody: The antibodies are diluted in blocking buffer.

- **Dilute the serum ENSG00000116285 at 1:500**

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 ERBB receptor feedback inhibitor 1 (ERRFI1) expression in 6 cells lines (HELA, 293T/17, Capan-2, SAOS-2, SH-SY5Y, Skin 3,44). The crude serum ENSG00000116285 has been tested at 1/1000.

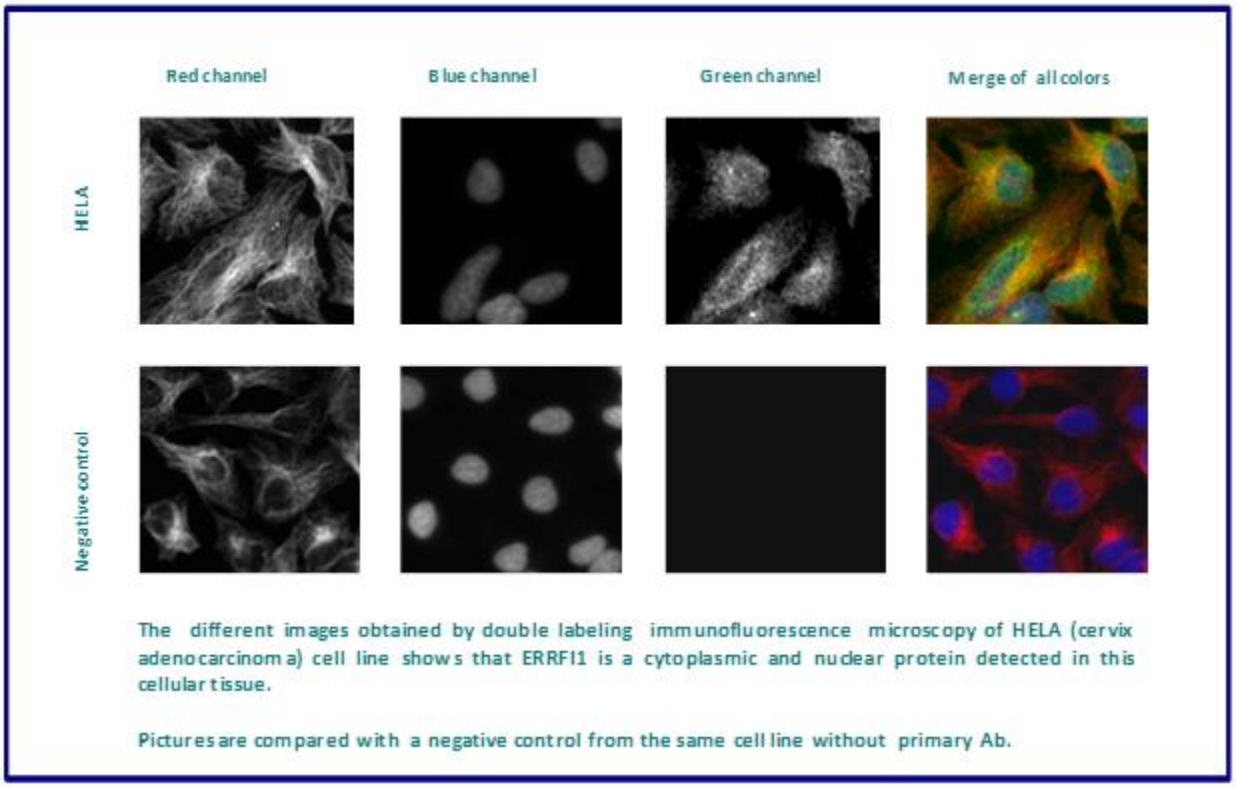
Red staining : cytoskeleton (microtubules/α-tubuline)

Blue staining : nucleus (Hoechst)

Green staining : anti- ERRFI1 antibody

Expected subcellular location : Cytoplasm. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Nucleus.

Note: Associated with the plasma membrane of basal skin keratinocytes. Translocates into the nucleus of differentiating suprabasal keratinocytes



The different images obtained by double labeling immunofluorescence microscopy of HELA (cervix adenocarcinoma) cell line shows that ERRFI1 is a cytoplasmic and nuclear protein detected in this cellular tissue.

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