

# CPTC-ERRFI1-2 (CAB080322)

Uniprot ID: [Q9UJM3](#)

Protein name: ERRFI\_HUMAN

Full name: ERBB receptor feedback inhibitor 1

**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 (By similarity).

**Subcellular location:**

Cytoplasm (*experimental evidence*)

Cell membrane (*by similarity*) (Topo: Peripheral membrane protein (*by similarity*) ; Orientation: Cytoplasmic side (*by similarity*))

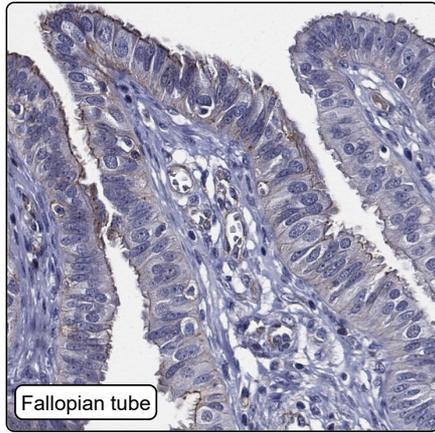
Nucleus (*by similarity*)

**NOTE:** Associated with the plasma membrane of basal skin keratinocytes. Translocates into the nucleus of differentiating suprabasal keratinocytes (By similarity).

**Protein existence:** Experimental evidence at protein level

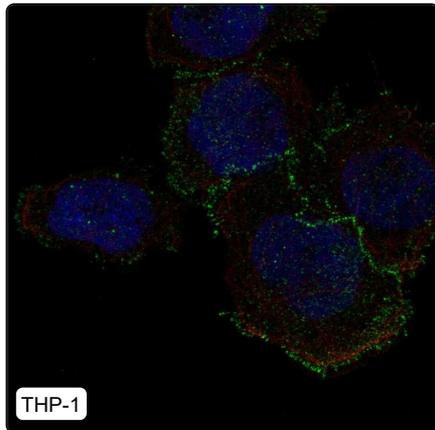
**Comment:**

## Immunohistochemistry



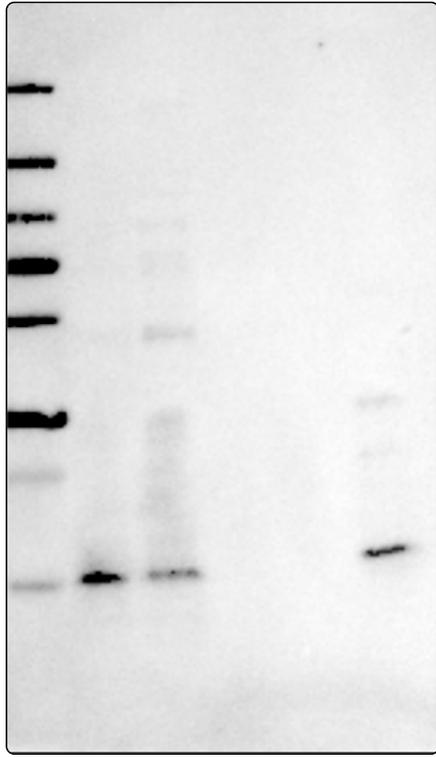
<b>IHC protocol:</b>	HIER pH6, Dilution 1:500
<b>IHC test staining:</b>	Membranous positivity in gi and fallopian tube. Additional positivity in endothelial cells.
<b>Literature conformance:</b>	Not consistent with gene/protein characterization data
<b>Literature significance:</b>	
<b>RNA similarity:</b>	Very low consistency between antibody staining and RNA expression data
<b>RNA tissue specificity:</b>	Tissue enhanced (liver,pancreas)
<b>RNA tissue distribution:</b>	Detected in all
<b>IHC Sibling similarity:</b>	Other antibody shows dissimilar IHC staining pattern

## Immunofluorescence



<b>IF Overlay:</b>	antibody (green), anti-tubulin (red) and DAPI (blue)
<b>IF main location:</b>	Focal adhesion sites - 5: <b>Approved</b> (auto)
<b>IF additional location:</b>	Nucleoplasm - 12: <b>Uncertain</b> (auto)
<b>IF approved for publication on HPA:</b>	No
<b>IF in THP-1:</b>	Focal Adhesions
<b>IF in U2OS:</b>	Nucleoplasm Focal Adhesions

# Western blot



<b>WB Size markers (kDa):</b>	250, 130, 100, 70, 55, 35, 25, 15, 10
<b>WB Lanes:</b>	Marker (1), RT-4 (2), U-251MG (3), Plasma (4), Liver (5), Tonsil (6)
<b>WB Target weight (kDa):</b>	6, 8, 9, 51
<b>WB Validation:</b>	Uncertain (Weak band of predicted size but with additional bands of higher intensity also present.)