

## **IEX-1** Antibody

Catalog # ASC10547

## **Specification**

## **IEX-1 Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Application Notes

WB, IHC-P, IF, E P46695

<u>P46695</u>, <u>8870</u> **Human, Mouse** 

Rabbit Polyclonal

IgG

IEX1 antibody can be used for detection of

IEX1 by Western blot at 1 - 2  $\mu$ g/mL.

Antibody can also be used for

immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20

μg/mL.

## **IEX-1** Antibody - Additional Information

Gene ID **8870** 

# **Target/Specificity**

IEX1 antibody was raised against a 24 amino acid synthetic peptide near the center of human IEX1.<br/>br><br/>The immunogen is located within amino acids 40 - 90 of IEX-1.

#### **Reconstitution & Storage**

IEX-1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

#### **Precautions**

IEX-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **IEX-1 Antibody - Protein Information**

Name IER3

Synonyms DIF2, IEX1, PRG1

#### **Function**

May play a role in the ERK signaling pathway by inhibiting the dephosphorylation of ERK by phosphatase PP2A-PPP2R5C holoenzyme. Also acts as an ERK downstream effector mediating survival. As a member of the NUPR1/RELB/IER3 survival pathway, may provide pancreatic ductal adenocarcinoma with remarkable resistance to cell stress, such as starvation or gemcitabine treatment.

# **Cellular Location**



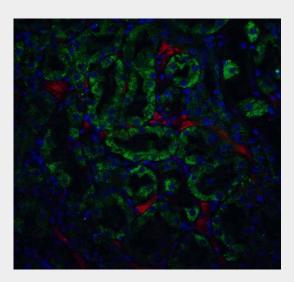
Membrane; Single- pass type II membrane protein

# **IEX-1 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### **IEX-1 Antibody - Images**



Immunofluorescence of CAD in mouse kidney tissue with CAD antibody at 5 µg/ml.

### **IEX-1 Antibody - Background**

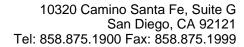
IEX-1 Antibody: IEX-1 is a stress inducible gene that is induced by ionizing radiation, ultraviolet radiation, and a variety of growth factors, i.e., FAS and TNF- $\alpha$ . IEX-1 is widely expressed in epithelial and endocrine tissues, as well as in vascular endothelium. It plays an important role in the regulation of cellular growth, cell death and oncogenesis. IEX-1 is precisely regulated by multiple transcription factors such as p53, NF-κB/rel, Sp1 and c-Myc, to ensure rapid and transient expression of IEX-1 in cells under a variety of stress conditions. IEX-1 is expressed as both a longer form (IEX1L) and a splice variant, designated IEX1S. It is localized to the nucleus and perinuclear region. Overexpression of IEX-1 facilitates apoptosis and cell cycle progression, whereas disruption of IEX-1 expression is associated with decreases in both apoptosis and cell cycle progression.

# **IEX-1 Antibody - References**

Kondratyev AD, Chung K-N and Jung MO. Identification and characterization of a radiation-inducible glycosylated human early-response gene. Cancer Res.1996; 56:1498-502.

Feldmann KA, Piddelkow MR, Roche PC, et al. Expression of an immediate early gene, IEX-1, in human tissues. Histochem. Cell Biol.2001; 115:489-97.

Wu MX, Zhaohui A, Prasad KVS, et al. IEX-1L, an apoptosis inhibitor involved in NFkappaB mediated





cell survival. Science1998; 281:998-1001.

Arlt A, Grobe O, Sieke A, et al. Expression of the NF-kappa B target gene IEX-1 (p22/PRG1) does not prevent cell death but instead triggers apoptosis in Hela cells. Oncogene2001; 20:69-76.