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IEX-1 Antibody

Catalog # ASC10547

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	P46695
Other Accession	P46695, 3123229
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	16903
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	IEX1 antibody can be used for detection of IEX1 by Western blot at 2 - 4 g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	8870
Other Names	Radiation-inducible immediate-early gene IEX-1, Differentiation-dependent gene 2 protein, Protein DIF-2, Immediate early protein GLY96, Immediate early response 3 protein, PACAP-responsive gene 1 protein, Protein PRG1, IER3, DIF2, IEX1, PRG1
Target/Specificity	IER3;
Reconstitution & Storage	IEX-1 antibody can be stored at 4℃ for three months and -20℃, 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.

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

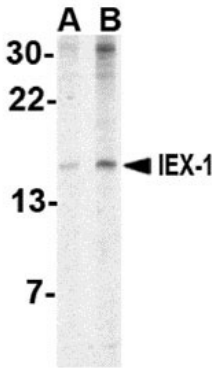
Background

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-α. 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.

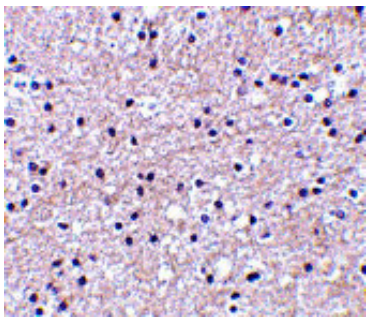
References

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.

Images

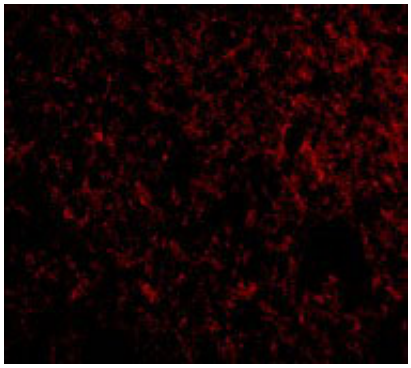


Western blot analysis of IEX1 in human brain tissue lysate with IEX1 antibody at (A) 2 and (B) 4 µg/mL.



Immunohistochemistry of IEX-1 in human liver tissue with IEX-1 antibody at 2.5 µg/mL.

Immunofluorescence of IEX-1 in Human Brain cells with IEX-1 antibody at 20 µg/mL.



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