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IER5 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17351C

Specification

IER5 Antibody (Center) - Product Information

Application WB,E **Primary Accession 05VY09** Other Accession NP 057629.2 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 33704 Antigen Region 122-149

IER5 Antibody (Center) - Additional Information

Gene ID 51278

Other Names

Immediate early response gene 5 protein, IER5

Target/Specificity

This IER5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 122-149 amino acids from the Central region of human IER5.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

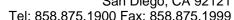
Precautions

IER5 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

IER5 Antibody (Center) - Protein Information

Name IER5

Function Plays a role as a transcription factor (PubMed: 22132193, PubMed: 25355627). Mediates





positive transcriptional regulation of several chaperone genes during the heat shock response in a HSF1- dependent manner (PubMed: 25355627, PubMed: 25816751). Mediates negative transcriptional regulation of CDC25B expression (PubMed:22132193). Plays a role in the dephosphorylation of the heat shock factor HSF1 and ribosomal protein S6 kinase (S6K) by the protein phosphatase PP2A (PubMed: 25816751, PubMed: 26496226). Involved in the regulation of cell proliferation and resistance to thermal stress (PubMed: 22132193, PubMed: 25355627, PubMed: 26496226). Involved in the cell cycle checkpoint and survival in response to ionizing radiation (PubMed: 19238419, PubMed: 22132193). Associates with chromatin to the CDC25B promoter (PubMed:22132193).

Cellular Location

Nucleus. Cytoplasm. Note=Predominantly cytoplasmic (PubMed:25816751). Translocated in the nucleus during heat shock (PubMed:25816751).

Tissue Location

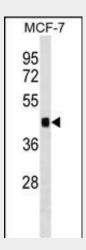
Expressed in acute myeloid leukemia (AML) cells.

IER5 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IER5 Antibody (Center) - Images



IER5 Antibody (Center) (Cat. #AP17351c) western blot analysis in MCF-7 cell line lysates (35ug/lane). This demonstrates the IER5 antibody detected the IER5 protein (arrow).

IER5 Antibody (Center) - Background

This gene encodes a protein that is similar to other immediate early response proteins. In the mouse, a similar gene may play an important role in mediating the cellular response to



mitogenic signals. Studies in rats found the expression of a similar gene to be increased after waking and sleep deprivation.

IER5 Antibody (Center) - References

Ding, K.K., et al. Radiat Environ Biophys 48(2):205-213(2009) Wan, D., et al. Proc. Natl. Acad. Sci. U.S.A. 101(44):15724-15729(2004) Cirelli, C., et al. Brain Res. 885(2):303-321(2000) Williams, M., et al. Genomics 55(3):327-334(1999)

IER5 Antibody (Center) - Citations

- PP2A-B55 and its adapter proteins IER2 and IER5 regulate the activity of RB family proteins and the expression of cell cycle-related genes
- IER family proteins are regulators of protein phosphatase PP2A and modulate the phosphorylation status of CDC25A.
- Regulation of the stability and activity of CDC25A and CDC25B by protein phosphatase PP2A and 14-3-3 binding.