

Goat Anti-IER5 Antibody

Peptide-affinity purified goat antibody Catalog # AF1554a

Specification

Goat Anti-IER5 Antibody - Product Information

Application WB, E
Primary Accession O5VY09

Other Accession <u>NP_057629</u>, <u>51278</u>

Reactivity
Host
Clonality
Concentration
Isotype
Human
Goat
Polyclonal
100ug/200ul
IgG

Calculated MW 33704

Goat Anti-IER5 Antibody - Additional Information

Gene ID 51278

Other Names

Immediate early response gene 5 protein, IER5

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-IER5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-IER5 Antibody - 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



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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.

Goat Anti-IER5 Antibody - Protocols

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

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

Goat Anti-IER5 Antibody - Images

Goat Anti-IER5 Antibody - 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.

Goat Anti-IER5 Antibody - References

Induced expression of the IER5 gene by gamma-ray irradiation and its involvement in cell cycle checkpoint control and survival. Ding KK, et al. Radiat Environ Biophys, 2009 Apr. PMID 19238419. The DNA sequence and biological annotation of human chromosome 1. Gregory SG, et al. Nature, 2006 May 18. PMID 16710414.

Large-scale cDNA transfection screening for genes related to cancer development and progression. Wan D, et al. Proc Natl Acad Sci U S A, 2004 Nov 2. PMID 15498874.

The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334.

Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. Strausberg RL, et al. Proc Natl Acad Sci U S A, 2002 Dec 24. PMID 12477932.