

# Goat Anti-IBP / DEF6 Antibody

Peptide-affinity purified goat antibody Catalog # AF1549a

### Specification

# Goat Anti-IBP / DEF6 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E <u>O9H4E7</u> <u>NP\_071330, 50619, 23853 (mouse)</u> Human Mouse, Rat, Pig, Dog Goat Polyclonal 100ug/200ul IgG 73910

## Goat Anti-IBP / DEF6 Antibody - Additional Information

Gene ID 50619

**Other Names** Differentially expressed in FDCP 6 homolog, DEF-6, IRF4-binding protein, DEF6, IBP

Dilution WB~~1:1000 E~~N/A

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-IBP / DEF6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# Goat Anti-IBP / DEF6 Antibody - Protein Information

Name DEF6

Synonyms IBP

Function



Phosphatidylinositol 3,4,5-trisphosphate-dependent guanine nucleotide exchange factor (GEF) which plays a role in the activation of Rho GTPases RAC1, RhoA and CDC42 (PubMed:<a href="http://www.uniprot.org/citations/12651066" target="\_blank">12651066</a>, PubMed:<a href="http://www.uniprot.org/citations/15023524" target="\_blank">15023524</a>). Can regulate cell morphology in cooperation with activated RAC1 (By similarity). Involved in immune homeostasis by ensuring proper trafficking and availability of T-cell regulator CTLA-4 at T-cell surface (PubMed:<a href="http://www.uniprot.org/citations/31308374" target="\_blank">31308374</a>). Plays a role in Th2 (T helper cells) development and/or activation, perhaps by interfering with ZAP70 signaling (By similarity).

#### **Cellular Location**

Cytoplasm. Cell membrane Nucleus. Cytoplasm, cytoskeleton. Cytoplasm, perinuclear region. Cell projection, filopodium. Note=Recruited to the plasma membrane upon binding phosphatidylinositol 3,4,5-trisphosphate (PubMed:15023524). Binds to actin filaments (PubMed:15023524)

**Tissue Location** 

Broadly expressed in the immune system. Highly expressed in T cells (PubMed:31308374).

## Goat Anti-IBP / DEF6 Antibody - Protocols

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

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

### Goat Anti-IBP / DEF6 Antibody - Images

250kDa 150kDa 100kDa 75kDa
50kDa
37kDa
25kDa
20kDa
15kDa

AF1549a (1  $\mu$ g/ml) staining of Human Thymus lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### Goat Anti-IBP / DEF6 Antibody - Background

DEF6, or IBP, is a guanine nucleotide exchange factor (GEF) for RAC (MIM 602048) and CDC42 (MIM 116952) that is highly expressed in B and T cells (Gupta et al., 2003 [PubMed 12923183]).



# Goat Anti-IBP / DEF6 Antibody - References

The role of height-associated loci identified in genome wide association studies in the determination of pediatric stature. Zhao J, et al. BMC Med Genet, 2010 Jun 14. PMID 20546612. Polymorphisms in innate immunity genes and risk of childhood leukemia. Han S, et al. Hum Immunol, 2010 Jul. PMID 20438785.

Risk of meningioma and common variation in genes related to innate immunity. Rajaraman P, et al. Cancer Epidemiol Biomarkers Prev, 2010 May. PMID 20406964.

Overexpression of the Interferon regulatory factor 4-binding protein in human colorectal cancer and its clinical significance. Zhang Z, et al. Cancer Epidemiol, 2009 Aug. PMID 19679060.

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