

Rabbit anti-Human DBF4 Polyclonal Antibody | anti-DBF4 antibody

Anti-DBF4 Antibody

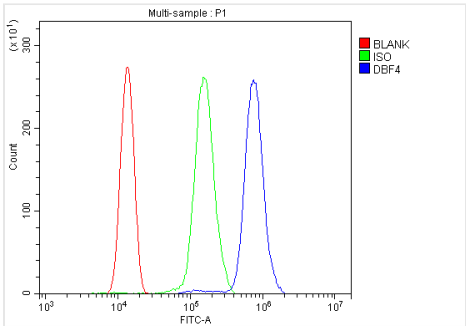
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125605	Rabbit	Human	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

DBF4; Polyclonal Antibody; Anti-DBF4 Antibody; Protein DBF4 homolog A; Activator of S phase kinase; Chiffon homolog A; DBF4-type zinc finger-containing protein 1; ASK; DBF4A; ZDBF1; DBF4 zinc finger; anti-DBF4 antibody

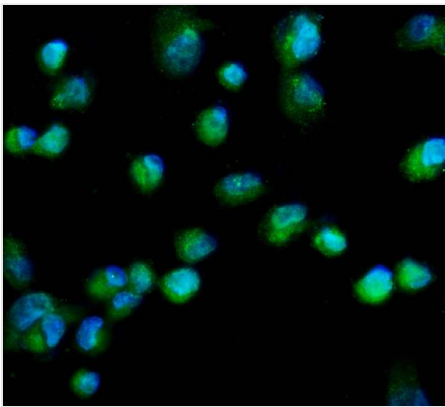
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for DBF4 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-DBF4 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E Coli-derived human DBF4 recombinant protein (Position:Y295-S665).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



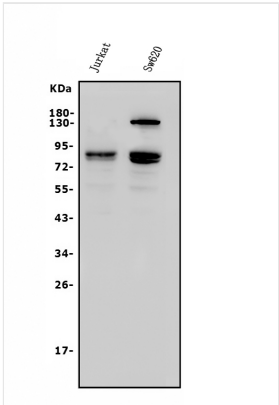
FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of THP-1 cells using anti-DBF4 antibody (AAA125605).Overlay histogram showing THP-1 cells stained with AAA125605 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-DBF4 Antibody (AAA125605, 1μg/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 2. IF analysis of DBF4 using anti- DBF4 antibody (AAA125605).DBF4 was detected in immunocytochemical section of SH-SY5Y cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 4μg/mL rabbit anti- DBF4 Antibody (AAA125605) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)

Figure 1. Western blot analysis of DBF4 using anti-DBF4 antibody (AAA125605).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: human Jurkat whole cell lysatesLane 2: human SW620 whole cell lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-DBF4 antigen affinity purified polyclonal antibody (Catalog # AAA125605) at 0. 5 μg/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for DBF4 at approximately 80KD. The expected band size for DBF4 is at 80KD.

ADDITIONAL INFORMATION

Related Product Information for anti-DBF4 antibody

Using both gain- and loss-of-function experiments, it was found that *Xenopus* Dbf4 inhibited canonical Wnt signaling. Depletion of endogenous Dbf4 did not disturb gastrulation movements or early organizer genes, but resulted in embryos with morphologically defective heart and eyes and suppressed cardiac markers. The function of Dbf4 in heart development appeared to be independent of its role in the cell cycle. Dbf4 interacted physically and functionally with Frodo, a context-dependent regulator of Wnt signaling.

References	1. Brott, B. K., Sokol, S. Y. A vertebrate homolog of the cell cycle regulator Dbf4 is an inhibitor of Wnt signaling required for heart development. Dev. Cell 8: 703-715, 2005. Brott, B. K., Sokol, S. Y. A vertebrate homolog of the cell cycle regulator Dbf4 is an inhibitor of Wnt signaling required for heart development. Dev. Cell 8: 703-715, 2005. 2. Lepke, M., Putter, V., Staib, C., Kneissl, M., Berger, C., Hoehn, K., Nanda, I., Schmid, M., Grummt, F. Identification, characterization and chromosomal localization of the cognate human and murine DBF4 genes. Molec. Gen. Genet. 262: 220-229, 1999. Lepke, M., Putter, V., Staib, C., Kneissl, M., Berger, C., Hoehn, K., Nanda, I., Schmid, M., Grummt, F. Identification, characterization and chromosomal localization of the cognate human and murine DBF4 genes. Molec. Gen. Genet. 262: 220-229, 1999. 3. Zegerman, P., Diffley, J. F. X. Checkpoint-dependent inhibition of DNA replication initiation by Sld3 and Dbf4 phosphorylation. Nature 467: 474-478, 2010.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	5729734
NCBI GeneID	10926
NCBI Accession #	NP_006707.1
NCBI GenBank Nucleotide #	NM_006716.3
UniProt Accession #	Q9UBU7; O75226; Q75MS6; Q75N01; Q9Y2M6; A4D1D8; A8K954
Molecular Weight	76,858 Da
NCBI Official Full Name	protein DBF4 homolog A
NCBI Official Synonym Full Names	DBF4 homolog (S. cerevisiae)
NCBI Official Symbol	DBF4
NCBI Official Synonym Symbols	ASK; CHIF; DBF4A; ZDBF1
NCBI Protein Information	protein DBF4 homolog A; chifon homolog A; activator of S phase kinase; zinc finger, DBF-type containing 1; DBF4-type zinc finger-containing protein 1
UniProt Protein Name	Protein DBF4 homolog A
UniProt Gene Name	DBF4
UniProt Synonym Gene Names	ASK; DBF4A; ZDBF1
UniProt Entry Name	DBF4A_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.