

**Dbf4 Polyclonal Antibody**

<b>Catalog No :</b>	YT1295
<b>Reactivity :</b>	Human;Mouse;Monkey
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	Dbf4
<b>Fields :</b>	>>Cell cycle
<b>Gene Name :</b>	DBF4
<b>Protein Name :</b>	Protein DBF4 homolog A
<b>Human Gene Id :</b>	10926
<b>Human Swiss Prot No :</b>	Q9UBU7
<b>Mouse Gene Id :</b>	27214
<b>Mouse Swiss Prot No :</b>	Q9QZ41
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human DBF4. AA range:10-59
<b>Specificity :</b>	Dbf4 Polyclonal Antibody detects endogenous levels of Dbf4 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml

---

**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

---

**Observed Band :** 77kD

---

**Cell Pathway :** Cell\_Cycle\_G1S;Cell\_Cycle\_G2M\_DNA;

---

**Background :** function:Regulatory subunit for CDC7 which activates its kinase activity thereby playing a central role in DNA replication and cell proliferation. Required for progression of S phase. The complex CDC7-DBF4A selectively phosphorylates MCM2 subunit at 'Ser-40' and 'Ser-53' and then is involved in regulating the initiation of DNA replication during cell cycle.,induction:Induced in G1 phase at low level, increased during G1-S phase and remain high during S and G2-M phase.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Contains 1 DBF4-type zinc finger.,similarity:Contains 2 BRCT domains.,subunit:Forms a complex with CDC7. Note that CDC7 forms distinct complex either with DBF4A or DBF4B. Such complexes are stable upon replication stress. Interacts with MEN1, MCM2, ORC2L, ORC4L and ORC6L.,tissue specificity:Highly expressed in testis and thymus. Expressed also in most cancer cells lines.,

---

**Function :** function:Regulatory subunit for CDC7 which activates its kinase activity thereby playing a central role in DNA replication and cell proliferation. Required for progression of S phase. The complex CDC7-DBF4A selectively phosphorylates MCM2 subunit at 'Ser-40' and 'Ser-53' and then is involved in regulating the initiation of DNA replication during cell cycle.,induction:Induced in G1 phase at low level, increased during G1-S phase and remain high during S and G2-M phase.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Contains 1 DBF4-type zinc finger.,similarity:Contains 2 BRCT domains.,subunit:Forms a complex with CDC7. Note that CDC7 forms distinct complex either with DBF4A or DBF4B. Such complexes are stable upon replication stress. Interacts with MEN1, MCM2, ORC2L, ORC4L and ORC6L.,tissue specificity:Highly expressed in testis and thymus. Expressed also in most ca

---

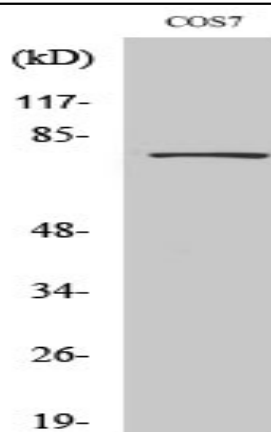
**Subcellular Location :** Nucleus .

---

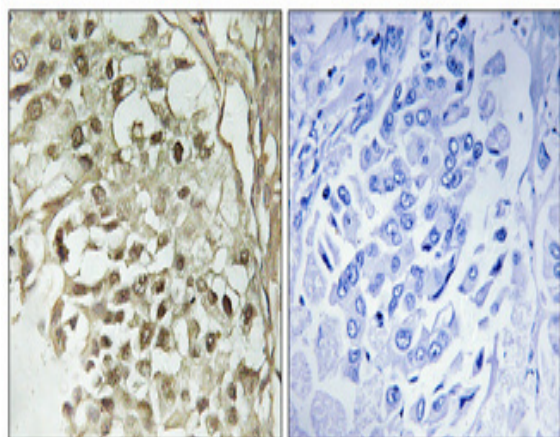
**Expression :** Highly expressed in testis and thymus. Expressed also in most cancer cells lines.

---

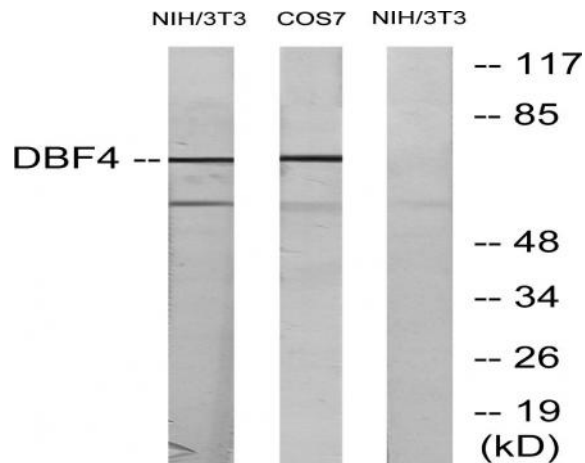
## Products Images



Western Blot analysis of various cells using Dbf4 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).



Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100 (4° overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



Western blot analysis of lysates from NIH/3T3 cells, treated with H<sub>2</sub>O<sub>2</sub> 100uM 30', COS7 treated with PMA 125ng/ml 30', using DBF4 Antibody. The lane on the right is blocked with the synthesized peptide.