



## Rabbit Anti-ZNF43 antibody

SL8109R

<b>Product Name:</b>	ZNF43
<b>Chinese Name:</b>	Zinc finger protein43抗体
<b>Alias:</b>	ARK1; AURKA; AURORA2; BTAK; HTF6; KOX27; STK15; Zinc finger protein 39; Zinc finger protein 43; Zinc finger protein HTF6; Zinc finger protein KOX27; Zinc protein HTF6; ZNF39; ZNF39L1; ZNF43; ZNF43_HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	94kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human ZNF43:111-110/809
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	Preservative: 15mM Sodium Azide, Constituents: 1% BSA, 0.01M PBS, pH 7.4
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	This gene belongs to the C2H2-type zinc finger gene family. The zinc finger proteins are involved in gene regulation and development, and are quite conserved throughout evolution. Like this gene product, a third of the zinc finger proteins containing C2H2 fingers also contain the KRAB domain, which has been found to be involved in protein-protein interactions. [provided by RefSeq, Jul 2008]

**Function:**

Mitotic serine/threonine kinases that contributes to the regulation of cell cycle progression. Associates with the centrosome and the spindle microtubules during mitosis and plays a critical role in various mitotic events including the establishment of mitotic spindle, centrosome duplication, centrosome separation as well as maturation, chromosomal alignment, spindle assembly checkpoint, and cytokinesis. Required for initial activation of CDK1 at centrosomes. Phosphorylates numerous target proteins, including ARHGEF2, BORA, BRCA1, CDC25B, DLGP5, HDAC6, KIF2A, LATS2, NDEL1, PARD3, PPP1R2, PLK1, RASSF1, TACC3, p53/TP53 and TPX2. Regulates KIF2A tubulin depolymerase activity. Required for normal axon formation. Plays a role in microtubule remodeling during neurite extension. Important for microtubule formation and/or stabilization. Also acts as a key regulatory component of the p53/TP53 pathway, and particularly the checkpoint-response pathways critical for oncogenic transformation of cells, by phosphorylating and stabilizing p53/TP53. Phosphorylates its own inhibitors, the protein phosphatase type 1 (PP1) isoforms, to inhibit their activity. Necessary for proper cilia disassembly prior to mitosis.

**Subunit:**

Interacts with FBXL7 (By similarity). Interacts with CPEB1, JTB, TACC1, TPX2, PPP2CA, as well as with the protein phosphatase type 1 (PP1) isoforms PPP1CA, PPP1CB and PPP1CC. Interacts also with its substrates ARHGEF2, BORA, BRCA1, KIF2A, PARD3, and p53/TP53. Interaction with BORA promotes phosphorylation of PLK1. Interacts with PIFO. Interacts with GADD45A, competing with its oligomerization. Interacts (via C-terminus) with AUNIP (via C-terminus). Identified in a complex with AUNIP and NIN. Interacts with FRY; this interaction facilitates AURKA-mediated PLK1 phosphorylation. Interacts with

**Subcellular Location:**

Nucleus.Cytoplasm.

**Tissue Specificity:**

Highly expressed in testis and weakly in skeletal muscle, thymus and spleen. Also highly expressed in colon, ovarian, prostate, neuroblastoma, breast and cervical cancer cell lines.

**Post-translational modifications:**

Activated by phosphorylation at Thr-288; this brings about a change in the conformation of the activation segment. Phosphorylation at Thr-288 varies during the cell cycle and is highest during M phase. Autophosphorylated at Thr-288 upon TPX2 binding. Thr-288 can be phosphorylated by several kinases, including PAK and PKA. Protein phosphatase type 1 (PP1) binds AURKA and inhibits its activity by dephosphorylating Thr-288 during mitosis. Phosphorylation at Ser-342 decreases the kinase activity. PPP2CA controls degradation by dephosphorylating Ser-51 at the end of mitosis. Ubiquitinated by the E3 ubiquitin-protein ligase complex SCF(FBXL7) during mitosis, leading to its degradation by the proteasome. Ubiquitinated by CHFR,

leading to its degradation by the proteasome (By similarity). Ubiquitinated by the anaphase-promoting complex (APC), leading to its degradation by the proteasome.

**Similarity:**

Belongs to the krueppel C2H2-type zinc-finger protein family.

Contains 22 C2H2-type zinc fingers.

Contains 1 KRAB domain.

**SWISS:**

P17038

**Gene ID:**

7594

**Database links:**

[Entrez Gene: 7594](#) Human

[Omim: 603972](#) Human

[SwissProt: P17038](#) Human

[Unigene: 534365](#) Human

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.