Rabbit Sox2 Polyclonal Antibody | anti-Sox2 antibody

Sox2 (Thr-118), phospho-specific Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71715	**Rabbit**	**Human, Rat, Mouse, Chicken, Fish**	**Immunocytochemistry, ELISA, Western Blot**

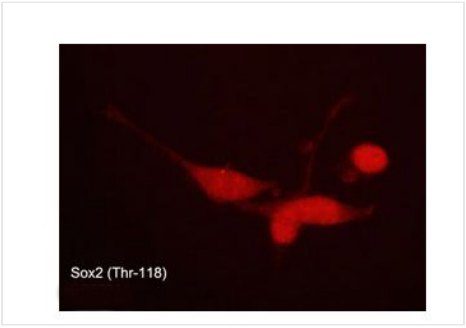
PRODUCT SYNONYMS

Sox2; Polyclonal Antibody; Sox2 (Thr-118); phospho-specific Antibody; phospho-specific; Sox2 118T; anti-Sox2 antibody

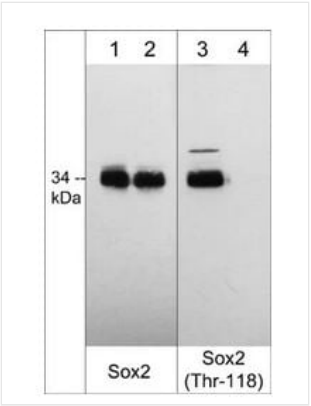
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Rat, Mouse, Chicken, Fish
Clonality	Polyclonal
Specificity	The antibody was cross adsorbed to unphosphorylated Sox2 (Thr-118) peptide before affinity purification using phospho-Sox2 (Thr-118) peptide. This antibody antibody detects a 34kDa* protein on SDS-PAGE immunoblots of mouse F9 stem cells. This reactivity is not observed after lambda phosphatase dephosphorylation of Sox2.
Form/Format	Rabbit polyclonal, affinity-purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-Sox2 antibody	ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	Phospho-Sox2 (Thr-118) synthetic peptide (coupled to carrier) corresponding to amino acids surrounding Thr-118 in mouse Sox2. This site is well conserved in rat and human Sox2, and has high homology with the conserved site in Sox1 (Thr-126) and Sox3 (Thr-144), but low homology to other Sox family members.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)
Immunocytochemical labeling of phosphorylated Sox2 in aldehyde fixed and NP-40 permeabilized human NCI-H446 lung carcinoma cells. The cells were labeled with rabbit polyclonal anti-Sox2 (Thr-118) phospho-specific (SP5521). The antibody was detected using goat anti-rabbit DyLight 594.



WB (Western Blot)
Western blot image of mouse F9 stem cells treated with with calyculin A (100nM, 30 min.) (lanes 1-4) then Sox2 was dephosphorylated with lambda phosphatase (lanes 2 & 4). The blot was probed with mouse monoclonal Sox2 (lanes 1 & 2) and rabbit polyclonal anti-Sox2 (Thr-118) phospho-specific antibody (lanes 3 & 4).

ADDITIONAL INFORMATION

Related Product Information for anti-Sox2 antibody	Embryonic stem cells can maintain a pluripotent state that is controlled by a set of transcription factors that include Oct-4, Sox2, and Nanog. Chromatin immunoprecipitation experiments show that Sox2 and Oct-4 bind to thousands of gene regulatory sites, many of which regulate cell pluripotency and early embryonic development. siRNA knockdown of either Sox2 or Oct-4 results in loss of pluripotency, while overexpression of Oct-4 and Sox2, along with additional transcription factors Klf4 and c-Myc, can reprogram somatic cells to a pluripotent state. Sox2 also regulates adult multipotent progenitors in various epithelial tissues, and may be important for survival and regeneration of these tissues. The activity of Sox2 may be regulated by phosphorylation and methylation. Akt1 phosphorylates Thr-118 and enhances Sox2 transcriptional activity, while Set7 can monomethylate Lys-119 leading to inhibition of Sox2 transcriptional activity, as well as Sox2 ubiquination and degradation. In addition, Sox2 Thr-128 is constituitively phoshorylated in the F9 mouse stem cell line.

NCBI AND UNIPROT INFORMATION

NCBI GI #	127140986
NCBI GeneID	20674
NCBI Accession #	NP_035573.3
NCBI GenBank Nucleotide #	NM_011443.4
UniProt Accession #	P48432
Molecular Weight	34kDa
NCBI Official Full Name	transcription factor SOX-2
NCBI Official Synonym Full Names	SRY (sex determining region Y)-box 2
NCBI Official Symbol	Sox2
NCBI Official Synonym Symbols	lcc; ysb; Sox-2
NCBI Protein Information	transcription factor SOX-2
UniProt Protein Name	Transcription factor SOX-2
UniProt Gene Name	**Sox2**
UniProt Synonym Gene Names	Sox-2

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.

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Online datasheet: https://www.aaabiotech.com/polyclonal/sox2-antibody-immunocytochemistry-western-blot-elisa/71715