

Anti-SRY antibody



Description Rabbit polyclonal to SRY.

Model STJ95789

Host Rabbit

Reactivity Human

Applications ELISA, IHC, WB

Immunogen Synthesized peptide derived from human SRY

Immunogen Region 30-110 aa, Internal

Gene ID <u>6736</u>

Gene Symbol SRY

Dilution range WB 1:500-1:2000IHC 1:100-1:300ELISA 1:20000

Specificity SRY Polyclonal Antibody detects endogenous levels of SRY protein.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Sex-determining region Y protein Testis-determining factor

Molecular Weight 37 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:11311OMIM:400044</u>

Alternative Names Sex-determining region Y protein Testis-determining factor

Function Transcriptional regulator that controls a genetic switch in male development.

It is necessary and sufficient for initiating male sex determination by directing the development of supporting cell precursors (pre-Sertoli cells) as Sertoli rather than granulosa cells . In male adult brain involved in the maintenance of motor functions of dopaminergic neurons . Involved in different aspects of gene regulation including promoter activation or repression . Promotes DNA bending. SRY HMG box recognizes DNA by partial intercalation in the minor groove. Also involved in pre-mRNA splicing. Binds to the DNA consensus

sequence 5'-[AT]AACAA[AT]-3'.

Sequence and Domain Family DNA binding and bending properties of the HMG domains of human and

mouse SRY differ form each other. Human SRY shows more extensive minor groove contacts with DNA and a lower specificity of sequence recognition

than mouse SRY.

Cellular Localization Nucleus speckle Cytoplasm Nucleus. Acetylation contributes to its nuclear

localization and deacetylation by HDAC3 induces a cytoplasmic

delocalization . Colocalizes with SOX6 in speckles . Colocalizes with CAML in the nucleus . Colocalizes in the nucleus with ZNF208 isoform KRAB-O $\,$

and tyrosine hydroxylase (TH).

Post-translational Phosphorylated on serine residues by PKA. Phosphorylation by PKA

enhances its DNA-binding activity and stimulates transcription repression. Acetylation of Lys-136 contributes to its nuclear localization and enhances its interaction with KPNB1. Deacetylated by HDAC3. Poly-ADP-ribosylated by

PARP1. ADP-ribosylation reduces its DNA-binding activity.

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Modifications

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