10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-SRY Picoband Antibody

Catalog # ABO12867

Product Information

Application	WB
Primary Accession	Q05066
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Sex-determining region Y protein(SRY) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	6736
Other Names	Sex-determining region Y protein, Testis-determining factor, SRY, TDF
Calculated MW	23884
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Nucleus speckle. Cytoplasm. Colocalizes with SOX6 in speckles. Colocalizes with CAML in the nucleus. Colocalizes in the nucleus with ZNF208 isoform KRAB-O and tyrosine hydroxylase (TH) (By similarity). .
Source	Eukaryota
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human SRY (90-130aa ISKQLGYQWKMLTEAEKWPFFQEAQKLQAMHREKYPNYKYR).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time. Avoid repeated freezing and thawing.

Protein Information

Name	SRY {ECO:0000303|PubMed:1695712, ECO:0000312|HGNC:HGNC:11311}
Function	Transcriptional regulator that controls a genetic switch in male development (PubMed:11563911). 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 (PubMed:16414182, PubMed:16996051). Involved in different aspects of gene regulation including promoter activation or repression (PubMed:9525897). Binds to the DNA consensus sequence 5'- [AT]AACAA[AT]-3' (PubMed:11563911, PubMed:1425584, PubMed:15170344, PubMed:8159753, PubMed:8265659). SRY HMG box recognizes DNA by partial intercalation in the minor groove and promotes DNA bending (PubMed:11563911, PubMed:1425584, PubMed:15170344, PubMed:16762365, PubMed:8159753, PubMed:8265659). Also involved in pre-mRNA splicing (PubMed:11818535). In male adult brain involved in the maintenance of motor functions of dopaminergic neurons (By similarity).
Cellular Location	Nucleus speckle. Cytoplasm Nucleus. Note=Acetylation contributes to its nuclear localization and deacetylation by HDAC3 induces a cytoplasmic delocalization (PubMed:15297880). Colocalizes with SOX6 in speckles (PubMed:11818535). Colocalizes with CAML in the nucleus (PubMed:15746192). Colocalizes in the nucleus with ZNF208 isoform KRAB- O and tyrosine hydroxylase (TH) (By similarity). Nuclear import is facilitated by XPO4, a protein that usually acts as a nuclear export signal receptor (PubMed:19349578). {ECO:0000250|UniProtKB:Q05738, ECO:0000269|PubMed:11818535, ECO:0000269|PubMed:15297880, ECO:0000269|PubMed:15746192, ECO:0000269|PubMed:19349578}

Background

This intronless gene encodes a transcription factor that is a member of the high mobility group (HMG)-box family of DNA-binding proteins. This protein is the testis-determining factor (TDF), which initiates male sex determination. Mutations in this gene give rise to XY females with gonadal dysgenesis (Swyer syndrome); translocation of part of the Y chromosome containing this gene to the X chromosome causes XX male syndrome.

Images

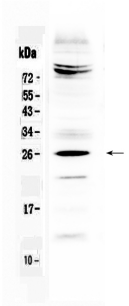


Figure 1. Western blot analysis of SRY using anti-SRY antibody (ABO12867).

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