



## Rabbit Anti-Sox3 antibody

SL10794R

<b>Product Name:</b>	Sox3
<b>Chinese Name:</b>	转录因子Sox3抗体
<b>Alias:</b>	Sox-3; GHDX; Infundibular hypoplasia and hypopituitarism; MRGH; PHP; SOXB; SRY Box 3; SRY related HMG box gene 3; SRY Sex Determining Region Y Box 3; Transcription factor SOX-3; SOX3 HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Sheep,
<b>Applications:</b>	WB=1:500-2000ELISA=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>	45kDa
<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 Sox3:101-200/446
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<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>	Sox genes comprise a family of genes that are related to the mammalian sex determining gene SRY. These genes similarly contain sequences that encode for the HMG-box domain, which is responsible for the sequence-specific DNA-binding activity. Sox genes encode putative transcriptional regulators implicated in the decision of cell fates during development and the control of diverse developmental processes.

The highly complex group of Sox genes cluster at least 40 different loci that rapidly diverged in various animal lineages. At present, 30 Sox genes have been identified. Members of this family have been shown to be conserved during evolution and to play key roles during animal development. Some are involved in human diseases, including sex reversal. Sox-3, also known as MRGH or SOXB, is implicated in mental retardation X-linked with isolated growth hormone deficiency (MRXGH) and infundibular hypoplasia and hypopituitarism.

**Function:**

SOX 3 is also known as SRY related HMG BOX gene 3. All SOX proteins have a single HMG box. Humans with mutations in SOX3 have panhypopituitarism. Conditional disruption of SOX3 in mice demonstrates that anterior pituitary development depends on SOX3 expression in the overlying neural ectoderm.

**Subunit:**

Interacts with SOX2 and FGFR1

**Subcellular Location:**

Nuclear.

**DISEASE:**

Defects in SOX3 are a cause of panhypopituitarism X-linked (PHPX) [MIM:312000]. Affected individuals have absent infundibulum, anterior pituitary hypoplasia, and ectopic posterior pituitary.

Defects in SOX3 are the cause of mental retardation X-linked with isolated growth hormone deficiency (MRXGH) [MIM:300123].

Defects in SOX3 are the cause of 46,XX sex reversal type 3 (SRXX3) [MIM:300833]. A condition in which male gonads develop in a genetic female (female to male sex reversal). Note=Copy number variations (CNV) encompassing or in close proximity to SOX3 are responsible for XX male reversal. These variations include two duplications of approximately 123 kb and 85 kb, the former of which spans the entire SOX3 gene; a 343 kb deletion immediately upstream of SOX3 that is probably responsible of altered regulation (and not increased dosage) of SOX3; a large (approximately 6 Mb) duplication that encompasses SOX3 and at least 18 additional distally located genes. Its proximal breakpoint falls within the SOX3 regulatory region. This large rearrangement has been found in a patient with XX male reversal and a complex phenotype that also includes a scrotal hypoplasia, microcephaly, developmental delay, and growth retardation.

**Similarity:**

Contains 1 HMG box DNA-binding domain.

**SWISS:**

P41225

**Gene ID:**

6658

**Database links:**

[Entrez Gene: 6658](#)Human

[Entrez Gene: 101030174](#)Monkey

[Entrez Gene: 20675](#)Mouse

[Omim: 313430](#)Human

[SwissProt: P41225](#)Human

[SwissProt: P53784](#)Mouse

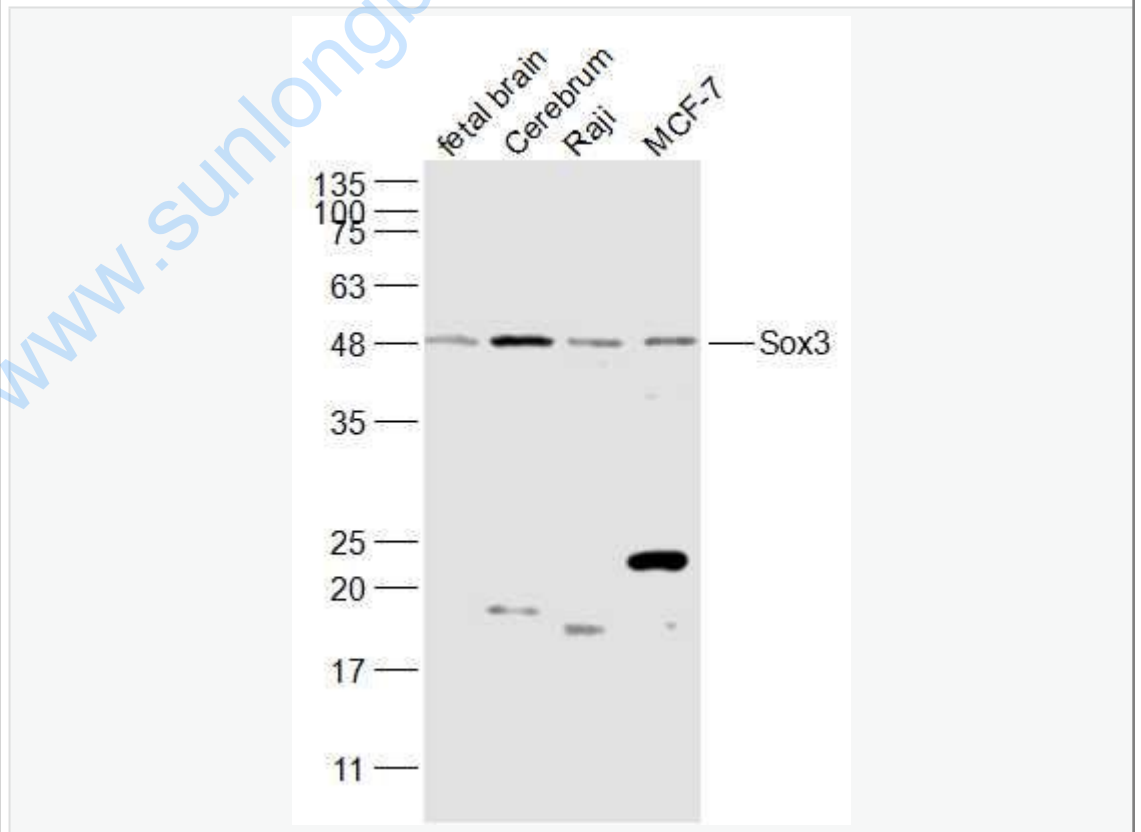
[Unigene: 157429](#)Human

[Unigene: 35784](#)Mouse

**Important Note:**

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

**Picture:**



Sample:

Cerebrum (Mouse) Lysate at 40 ug

Fetal brain (Mouse) Lysate at 40 ug

Raji(Human) Cell Lysate at 30 ug

MCF-7(Human) Cell Lysate at 30 ug

Primary: Anti-Sox3 (SL10794R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 45 kD

Observed band size: 48 kD

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