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SOX9 Recombinant Rabbit mAb

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Catalog # AP94827

Product Information

Application	WB, IHC-P, IHC-F, IF
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Recombinant
Physical State	Liquid
Immunogen	A synthesized peptide derived from human SOX9
Epitope Specificity	150-300/509
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS(pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus. Cytoplasm (By similarity). Note=Restricted to the nucleus of Sertoli-like cells in the testis, but localizes to the cytoplasm of previtellogenic oocytes in the ovary before being translocated into the nucleus of vitellogenic oocytes (By similarity).
DISEASE	Defects in SOX9 are the cause of campomelic dysplasia (CMD1) [MIM:114290]. CMD1 is a rare, often lethal, dominantly inherited, congenital osteochondrodysplasia, associated with male-to-female autosomal sex reversal in two-thirds of the affected karyotypic males. A disease of the newborn characterized by congenital bowing and angulation of long bones, unusually small scapulae, deformed pelvis and spine and a missing pair of ribs. Craniofacial defects such as cleft palate, micrognatia, flat face and hypertelorism are common. Various defects of the ear are often evident, affecting the cochlea, malleus incus, stapes and tympanum. Most patients die soon after birth due to respiratory distress which has been attributed to hypoplasia of the tracheobronchial cartilage and small thoracic cage. Defects in SOX9 are the cause of 46,XX sex reversal type 2 (SRXX2) [MIM:278850]. SRXX2 is a condition in which male gonads develop in a genetic female (female to male sex reversal).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	May be involved in chondrogenesis (cartilage development) during bone formation. Unlikely to play a role in sex determination but may function during testicular and ovarian differentiation (By similarity). Transcriptional activator. Acts early in neural crest formation, functioning redundantly with the other group E Sox factors sox8 and sox10 to induce neural crest progenitors. Induces sox10 expression downstream of wnt-signaling. Principally involved in development of the cranial neural crest, which is fated to form skeletal elements. Also required for otic placode specification during inner ear development.

Additional Information

Dilution	WB=1:1000-5000,IHC-P=1:200-1000,IF=1:200-1000,IHC-F=1:200-1000,ICC/IF=1:50-200,Flow-Cyt=1:50-100
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Background

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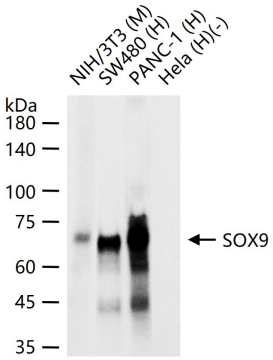
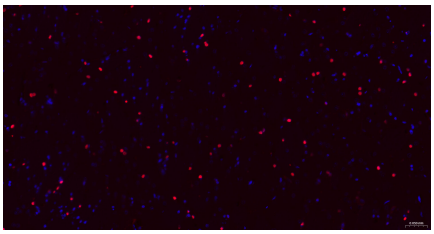
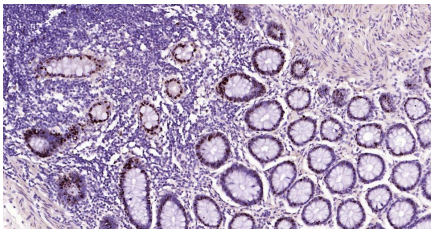
Images



25 ug total protein per lane of various lysates (see on figure) probed with SOX9 monoclonal antibody, unconjugated (AP94827) at 1:2000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



Paraformaldehyde-fixed, paraffin embedded Rat Cerebrum; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with SOX9 Monoclonal Antibody, Unconjugated (AP94827) at 1:200 overnight at 4°C. Followed by conjugated Goat Anti-Rabbit IgG antibody (Red, AP94827-BF594), DAPI (blue, C02-04002) was used to stain the cell nuclei.



Paraformaldehyde-fixed, paraffin embedded Human Colon; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with SOX9 Monoclonal Antibody, Unconjugated(AP94827) at 1:400 overnight at 4°C, followed by conjugation to the AP94827-HRP and DAB (C-0010) staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.