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

SOX9 Rabbit pAb

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Catalog # AP94250

Product Information

Application	IHC-P, IHC-F, IF
Reactivity	Rat, Human, Mouse
Predicted	Pig, Rabbit, Horse
Host	Rabbit
Clonality	Polyclonal
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SOX9
Epitope Specificity	121-220/509
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	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1ug/test
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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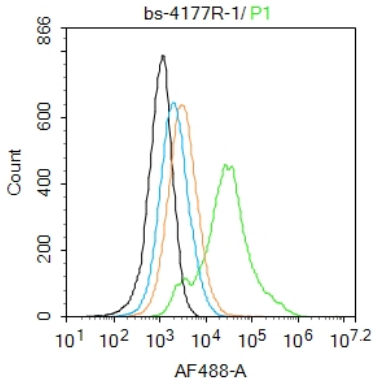
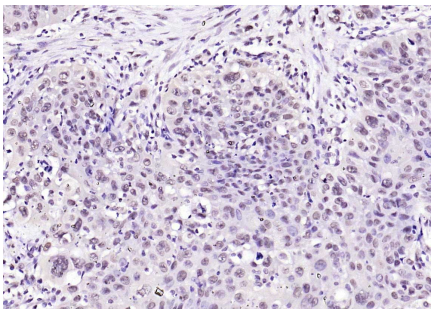
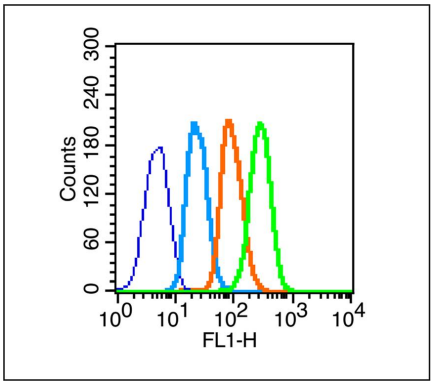
Images



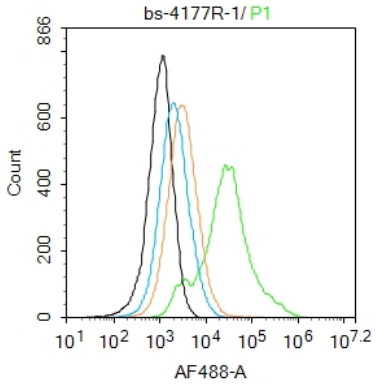
Blank control:293T.
Primary Antibody (green line): Rabbit Anti-SOX9 antibody (AP94250)
Dilution: 1 μg /10^6 cells;
Isotype Control Antibody (orange line): Rabbit IgG .
Secondary Antibody : Goat anti-rabbit IgG-AF488
Dilution: 1 μg /test.
Protocol
The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20℃. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



Paraformaldehyde-fixed, paraffin embedded (human gastric carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SOX9) Polyclonal Antibody, Unconjugated (AP94250) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Blank control (blue line): U251 (fixed with 2% paraformaldehyde (10 min , then permeabilized) with 90% ice-cold methanol for 20 min on ice). Primary Antibody (green line): Rabbit Anti- SOX9 antibody (AP94250),dilution: 1 μg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE,Dilution: 1 μg /test.



Blank control:293T. Primary Antibody (green line): Rabbit Anti-SOX9 antibody (AP94250) Dilution: 1 µg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-AF488 Dilution: 1 µg /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20℃. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.