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#82630**Sox9 (D8G8H) Rabbit mAb**

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W, IHC-Bond, IHC-P	<b>Reactivity:</b> H M	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 70	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #P48436	<b>Entrez-Gene Id:</b> 6662
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**Product Usage Information****Application**

Western Blotting  
IHC Leica Bond  
Immunohistochemistry (Paraffin)

**Dilution**

1:1000  
1:50 - 1:200  
1:300 - 1:1200

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #74021.

**Specificity/Sensitivity**

Sox9 (D8G9H) Rabbit mAb recognizes endogenous levels of total Sox9 protein.

**Species predicted to react based on 100% sequence homology**

Rat

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human Sox9 protein.

**Background**

Sox9 is a transcription factor with an HMG-box DNA binding domain that has homology to the HMG domain of the mammalian testis-determining factor, SRY (1). Sox9 regulates several important processes during embryonic development including chondrogenesis, during which it contributes to skeletal formation and digit specification (2,3). Sox9 also coordinates with steroidogenic factor-1 to direct Sertoli cell-specific expression of anti-Mullerian hormone during embryogenesis, thereby contributing to male sex determination (4). In addition, Sox9 is reportedly involved in the maintenance of adult stem cell populations, including multipotent neural stem cells (5), hair follicle stem cells (6), and mammary stem cells (7). Recent interest has focused on the role of Sox9 in tumor biology. For example, research studies have shown that Sox9 expression in lung adenocarcinoma induces a mesenchymal phenotype in tumor cells (8). Other research studies have shown that YAP1 induced upregulation of Sox9 confers cancer stem cell like properties on esophageal cancer cells (9). Moreover, Sox9 expression has been linked with several other tumor types including ovarian, prostate, and pancreatic malignancies (10-12).

**Background References**

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- Kadaja, M. et al. (2014) *Genes Dev* 28, 328-41.
- Guo, W. et al. (2012) *Cell* 148, 1015-28.
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- Shroff, S. et al. (2014) *Hum Pathol* 45, 456-63.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **IHC-Bond:** IHC Leica Bond **IHC-P:** Immunohistochemistry (Paraffin)

## Cross-Reactivity Key

**H:** Human **M:** Mouse

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