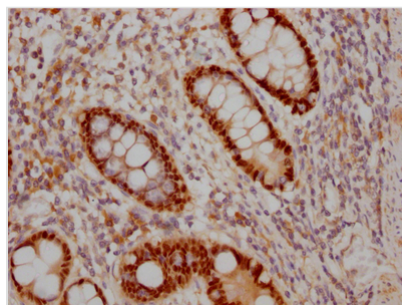




# SOX9 Recombinant Monoclonal Antibody

<b>Product Code</b>	CSB-RA202969A0HU
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	P48436
<b>Immunogen</b>	A synthesized peptide derived from human SOX9
<b>Species Reactivity</b>	Human
<b>Tested Applications</b>	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
<b>Relevance</b>	Transcription factor that plays an important role in the normal skeletal development (PubMed:24038782). May regulate the expression of other genes involved in chondrogenesis by acting as a transcription factor for these genes.
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Purification Method</b>	Affinity-chromatography
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Product Type</b>	Recombinant Antibody
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Research Area</b>	Epigenetics and Nuclear Signaling; Neuroscience; Developmental biology; Stem cells
<b>Gene Names</b>	SOX9
<b>Clone No.</b>	5H12

## Image



IHC image of CSB-RA202969A0HU diluted at 1:100 and staining in paraffin-embedded human colon cancer performed on a Leica Bond<sup>TM</sup> system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

## Description

To develop the SOX9 recombinant monoclonal antibody, a rigorous and intricate process is required. Initially, the SOX9 monoclonal antibody is harvested and its gene sequence is determined. A vector containing the SOX9 monoclonal antibody gene is then generated and transfected into a host cell line for



culturing. The SOX9 monoclonal antibody is produced using a synthetic peptide from human SOX9 as an immunogen. Subsequently, the SOX9 recombinant monoclonal antibody undergoes purification via affinity chromatography to ensure high specificity. This antibody is then thoroughly tested for its specificity in recognizing its target by utilizing ELISA and IHC assays. It only reacts with human SOX9 protein.

SOX9 is a critical transcription factor that regulates the development and differentiation of various tissues during embryonic development and adult tissue homeostasis. SOX9 is a master regulator of chondrogenesis. It is required for the differentiation of mesenchymal stem cells into chondrocytes, the cells that produce and maintain the cartilage matrix. SOX9 plays a critical role in male sex determination by regulating the differentiation of the gonads into testes during embryonic development. Its dysregulation can contribute to various diseases, such as skeletal dysplasias, osteoarthritis, and cancer.