Immunotag[™] Sox2 mouse mAb

Antibody Specification	
Catalog No.	ITM1221
Product Description	Immunotag™ Sox2 mouse mAb
Size	50 μg, 100 μg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	SOX2
Clonality	Monoclonal
Storage/Stability	-20°C/1 year
Application	WB,FC,ICC
Recommended Dilution	wb 1:1000 icc 1:150
Concentration	1 mg/ml
Reactive Species	Mouse
Host Species	Mouse
Immunogen	Purified recombinant mouse Sox2 protein fragments expressed in E.coli
Specificity	This antibody detects endogenous levels of Sox2 and does not cross-react with related proteins.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	sox2
Accession No.	P48431 P48432
Alternate Names	ANOP3;cb236;Delta EF2a;lcc;MCOPS3;MGC148683;MGC2413;RGD1565646;Sex determining region Y box 2;SOX 2;Sox2;SOX2_HUMAN;SRY (sex determining region Y) box 2;SRY box containing gene 2;SRY related HMG box 2;SRY related HMG box gene 2;SRY-box 2;Transcription factor SOX 2;Transcription factor SOX-2;ysb.

Antibody Specification	
Description	SRY-box 2(SOX2) Homo sapiens This intronless gene encodes a member of the SRY-related HMG-box (SOX) family of transcription factors involved in the regulation of embryonic development and in the determination of cell fate. The product of this gene is required for stem-cell maintenance in the central nervous system, and also regulates gene expression in the stomach. Mutations in this gene have been associated with optic nerve hypoplasia and with syndromic microphthalmia, a severe form of structural eye malformation. This gene lies within an intron of another gene called SOX2 overlapping transcript (SOX2OT). [provided by RefSeq, Jul 2008],
Protein Expression	Fetal brain,Lung,Retina,
Subcellular Localization	nucleus,nucleoplasm,transcription factor complex,cytoplasm,cytosol,
Protein Function	disease:Defects in SOX2 are the cause of microphthalmia syndromic type 3 (MCOPS3) [MIM:206900]. Microphthalmia is a clinically heterogeneous disorder of eye formation, ranging from small size of a single eye to complete bilateral absence of ocular tissues (anophthalmia). In many cases, microphthalmia/anophthalmia occurs in association with syndromes that include non-ocular abnormalities. MCOPS3 is characterized by the rare association of malformations including uni- or bilateral anophthalmia or microphthalmia, and esophageal atresia with trachoesophageal fistula.,function:Transcription factor that forms a trimeric complex with OCT4 on DNA and controls the expression of a number of genes involved in embryonic development such as YES1, FGF4, UTF1 and ZFP206. Critical for early embryogenesis and for embryonic stem cell pluripotency.,online information:Sox2 entry,PTM:Sumoylation inhibits binding on DNA and negatively regulates the FGF4 transactivation.,similarity:Contains 1 HMG box DNA-binding domain.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.

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