

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human SOX6 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) SOX5 or rhSOX13 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 667162
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human SOX6 Met1-Leu339 Accession # P35712
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

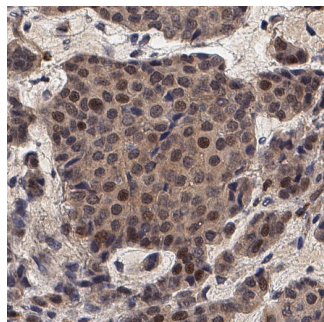
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Immunohistochemistry	5-25 µg/mL	Immersion fixed paraffin-embedded sections of Human Liver Cancer

DATA

Immunohistochemistry



Detection of SOX6 in Human Liver Cancer. SOX6 was detected in immersion fixed paraffin-embedded sections of Human Liver Cancer using Mouse Anti-Human SOX6 Monoclonal Antibody (Catalog # MAB77591) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cell nuclei. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

SOX6 is a 92 kDa member of the Sox [Sry-related high mobility group (HMG) box] DNA binding protein family, and initially was isolated from an adult testis cDNA library. Human SOX6 is 828 amino acids (aa) in length. Aa 184-262 constitute a coiled-coil region. Aa 219-261, 280-285, and 313-317 make up a Glu-rich and two poly-Ala regions, respectively. Also, there are two additional isoforms for SOX6. Isoform 2 is formed by the deletion of aa 327-367 found in isoform 1, and isoform 3 is formed by the deletion of aa 579-598 found in isoform 1. Finally, aa 620-683 make up the SOX-TCF-HMG-box region. Human SOX6 shares 97% aa identity with mouse SOX6. Previous studies have suggested that SOX6 plays a role in the development of the central nervous system (CNS) and chondrogenesis. Another study, however, revealed that the mutant pLOOH allele, which is located on the same chromosome as SOX6, develops myopathy and an atrioventricular (AV) heart block, a cardiac conduction defect that is a main cause of death in human cardiac myopathies. Electronmicroscopic evaluation of the mutant cardiac and skeletal muscle demonstrated significant change in ultrastructure. Thus, the phenotype of the pLOOH mutation suggests that the SOX6 protein also may be involved in maintaining normal physiological functions of muscle tissue, including the heart. In addition genome-wide association studies have found that the SOX6 gene plays an important role in the coregulation of obesity and osteoporosis. Moreover, SOX6 has been shown to be a transcriptional factor that is specifically expressed in the developing nervous system and in the early stages of chondrogenesis in mouse embryos, and it has been revealed that SOX6 was expressed in glioma tissues, but not in normal adult brain tissue.