



SmcX Monoclonal Antibody

Catalog No	YP-Ab-01053
Isotype	IgG
Reactivity	Human;Mouse;Rat;Bovine;Dog
Applications	WB;IF
Gene Name	KDM5C
Immunogen	Purified recombinant human SmcX (C-terminus) protein fragments expressed in E.coli.
Specificity	SmcX Monoclonal Antibody detects endogenous levels of SmcX protein.
Formulation	Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/1000 - 1/2000. Immunofluorescence: 1/100 - 1/500. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Lysine-specific demethylase 5C;Jumonji/ARID domain-containing protein 1C; JARID1C;SmcX;KDM5C;DXS1272E;XE169;Histone demethylase JARID1C; Protein SmcX;Protein Xe169
Observed Band	176kD
Calculated Molecular Weight	176kD
Cell Pathway	Nucleus .
Tissue Specificity	Expressed in all tissues examined. Highest levels found in brain and skeletal muscle.
Function	cofactor:Alpha-ketoglutarate.,cofactor:Fe(2+).,disease:Defects in KDM5C are a cause of X-linked mental retardation (XLMR) [MIM:300534]. Mental retardation is usually defined as cognitive impairment with an IQ less than 70. Etiologically, mental retardation is a very heterogeneous condition that involves environmental, stochastic and/or genetic factors.,domain:Both the JmjC domain and the JmjN domain are required for enzymatic activity.,domain:The first PHD-type zinc finger domain recognizes and binds H3-K9Me3.,function:Histone demethylase that specifically demethylates 'Lys-4' of histone H3, thereby playing a central role in histone code. Does not demethylate histone H3 'Lys-9', H3 'Lys-



27', H3 'Lys-36', H3 'Lys-79' or H4 'Lys-20'. Demethylates trimethylated and dimethylated but not monomethylated H3 'Lys-4'. Participates in transcriptional repression of neuronal genes by recruiting hist

Background

This gene is a member of the SMCY homolog family and encodes a protein with one ARID domain, one JmjC domain, one JmjN domain and two PHD-type zinc fingers. The DNA-binding motifs suggest this protein is involved in the regulation of transcription and chromatin remodeling. Mutations in this gene have been associated with X-linked mental retardation. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2009],

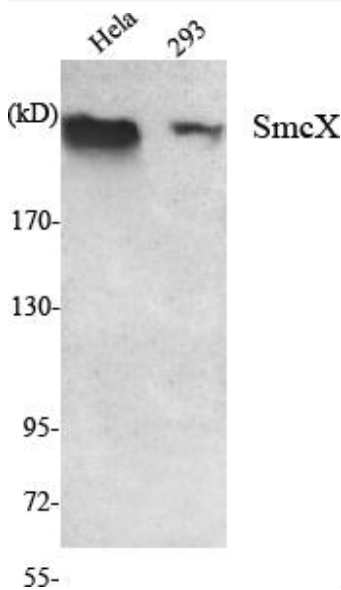
matters needing attention

Avoid repeated freezing and thawing!

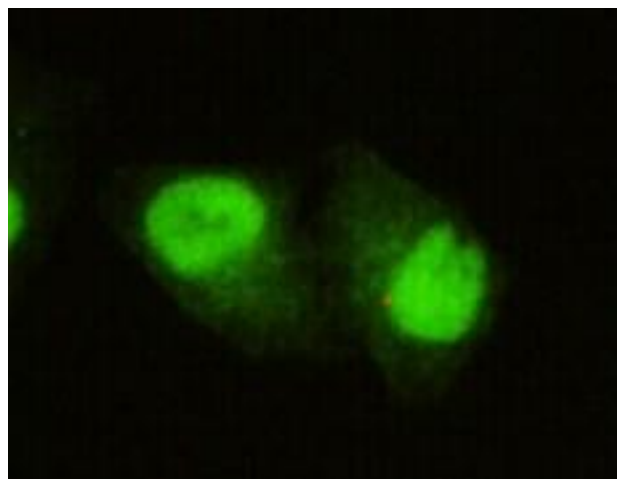
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis using SmcX Monoclonal Antibody against HeLa, 293 cell lysate.



Immunofluorescence analysis of HeLa cells using SmcX Monoclonal Antibody.