Immunotag™ SmcX Monoclonal Antibody

Antibody Specification

Catalog No.	ITM1096
Product Description	Immunotag™ SmcX Monoclonal Antibody
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	SmcX
Clonality	Monoclonal
Storage/Stability	-20°C/1 year
Application	WB,IF
Recommended Dilution	Western Blot: 1/1000 - 1/2000. Immunofluorescence: 1/100 - 1/500. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat,Bovine,Dog
Host Species	Mouse
Immunogen	Purified recombinant human SmcX (C-terminus) protein fragments expressed in E.coli.
Specificity	SmcX Monoclonal Antibody detects endogenous levels of SmcX protein.
Purification	Affinity purification
Form	Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol.
Gene Name	KDM5C
Accession No.	P41229 P41230
Alternate Names	KDM5C; DXS1272E; JARID1C; SMCX; XE169; Lysine-specific demethylase 5C; Histone demethylase JARID1C; Jumonji/ARID domain-containing protein 1C; Protein SmcX; Protein Xe169

Antibody Specification

Description	lysine demethylase 5C(KDM5C) Homo sapiens 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],
Protein Expression	Blood,Epithelium,Eye,Fibroblast,Uterus,
Subcellular Localization	nucleus,nucleoplasm,
Protein 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 histone deacetylases and REST at neuron-restrictive silencer elements.,miscellaneous:Escapes X-inactivation.,similarity:Belongs to the JARID1 histone demethylase family.,similarity:Contains 1 ARID domain.,similarity:Contains 1 JmjC domain.,similarity:Contains 1 JmjN domain.,similarity:Contains 2 PHD-type zinc fingers.,subunit:Part of two distinct complexes, one containing E2F6, and the other containing REST.,tissue specificity:Expressed in all tissues examined. Highest levels found in brain and skeletal muscle.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.