ARG53985
anti-JMJD6 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody recognizes JMJD6
Tested Reactivity	Hu
Tested Application	ICC/IF, WB
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Target Name	JMJD6
Species	Human
Immunogen	Purified recombinant human JMJD6 (N-terminus) fragments expressed in E.coli.
Conjugation	Un-conjugated
Alternate Names	Peptide-lysine 5-dioxygenase JMJD6; JmjC domain-containing protein 6; Protein PTDSR; Phosphatidylserine receptor; PTDSR1; Lysyl-hydroxylase JMJD6; PTDSR; EC 1.14.11.-; PSR; Bifunctional arginine demethylase and lysyl-hydroxylase JMJD6; Jumonji domain-containing protein 6; Histone arginine demethylase JMJD6

Application Instructions

Application table

Application	Dilution
ICC/IF	1:200
WB	1:1000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Observed Size	62 kDa

Properties

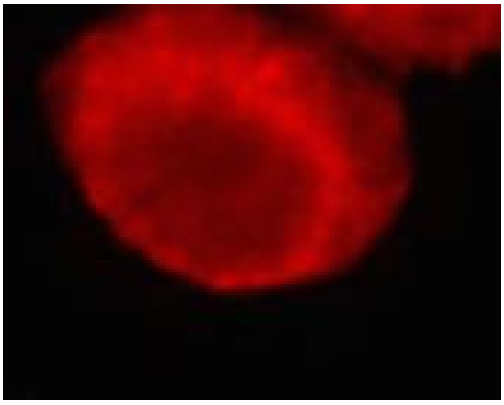
Form	Liquid
Purification	Affinity purified
Buffer	0.1M Tris-Glycine (pH 7.4), 150 mM NaCl, 0.2% Sodium azide and 50% Glycerol
Preservative	0.2% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

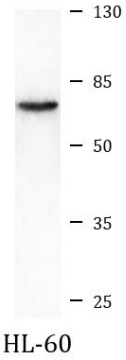
Database links	GeneID: 23210 Human Swiss-port # Q6NYC1 Human
Gene Symbol	JMJD6
Gene Full Name	jumonji domain containing 6
Background	Dioxygenase that can both act as a histone arginine demethylase and a lysyl-hydroxylase. Acts as a lysyl-hydroxylase that catalyzes 5-hydroxylation on specific lysine residues of target proteins such as U2AF2/U2AF65 and LUC7L2. Acts as a regulator of RNA splicing by mediating 5-hydroxylation of U2AF2/U2AF65, affecting the pre-mRNA splicing activity of U2AF2/U2AF65. In addition to peptidyl-lysine 5-dioxygenase activity, may act as a RNA hydroxylase, as suggested by its ability to bind single strand RNA. Also acts as an arginine demethylase which demethylates histone H3 at 'Arg-2' (H3R2me) and histone H4 at 'Arg-3' (H4R3me), thereby playing a role in histone code. However, histone arginine demethylation may not constitute the primary activity in vivo. Has no histone lysine demethylase activity. Required for differentiation of multiple organs during embryogenesis. Acts as a key regulator of hematopoietic differentiation: required for angiogenic sprouting by regulating the pre-mRNA splicing activity of U2AF2/U2AF65. Seems to be necessary for the regulation of macrophage cytokine responses.
Function	Dioxygenase that can both act as a histone arginine demethylase and a lysyl-hydroxylase. Acts as a lysyl-hydroxylase that catalyzes 5-hydroxylation on specific lysine residues of target proteins such as U2AF2/U2AF65 and LUC7L2. Acts as a regulator of RNA splicing by mediating 5-hydroxylation of U2AF2/U2AF65, affecting the pre-mRNA splicing activity of U2AF2/U2AF65. In addition to peptidyl-lysine 5-dioxygenase activity, may act as an RNA hydroxylase, as suggested by its ability to bind single strand RNA. Also acts as an arginine demethylase which demethylates histone H3 at 'Arg-2' (H3R2me) and histone H4 at 'Arg-3' (H4R3me), thereby playing a role in histone code. However, histone arginine demethylation may not constitute the primary activity in vivo. Has no histone lysine demethylase activity. Required for differentiation of multiple organs during embryogenesis. Acts as a key regulator of hematopoietic differentiation: required for angiogenic sprouting by regulating the pre-mRNA splicing activity of U2AF2/U2AF65. Seems to be necessary for the regulation of macrophage cytokine responses. [UniProt]
Research Area	Cell Biology and Cellular Response antibody; Cell Death antibody; Developmental Biology antibody; Gene Regulation antibody; Immune System antibody
Calculated Mw	46 kDa
Cellular Localization	Nucleus

Images



ARG53985 anti-JMJD6 antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG53985 anti-JMJD6 antibody at 1:200 dilution.



ARG53985 anti-JMJD6 antibody WB image

Western blot: HL-60 cell lysate stained with ARG53985 anti-JMJD6 antibody at 1:1000 dilution.