

## Anti-KDM5A/ RBP2/ JARID1A antibody, mouse monoclonal (18E8), KO Validated

Product code	71-177
Size	100 μg
Storage	-20℃
Concentration	1.0 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified IgG fraction with protein A from hybridoma cell culture medium.
Immunogen	Synthetic peptide corresponding to human RBP2, amino acids 1416-1434.
Isotype	Mouse IgG2aк
Reactivity	Human and mouse RBP2. Can detect endogenous levels of RBP2.
Special notes	Validation: Specificity was validated with KO cells (human) for Western Blotting.
Application	<ol> <li>Western blotting (~1μg/ml)</li> <li>Immunofluorescence staining (~1 μg/ml)</li> </ol>
	3. Flow Cytometry (1µg for 10 <sup>6</sup> cells.)
Background	RBP2 was originally identified as a retinoblastoma binding protein. It is also known as JARID1A (Jumonji, AT rich interactive domain 1A). RBP2 plays both negative and positive roles in RB-mediated transcriptional activation, depending on the kinds of genes and regulates differentiation by its function as an H3K4 histone demethylase (1, 2 & 3).
Data Link	UniProtKB/Swiss-Prot <u>P29375</u> (KDM5A_HUMAN)
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Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.



**Data Images:** 71-177 Anti-KDM5A/ RBP2/ JARID1A antibody, mouse monoclonal (18E8), KO Validated

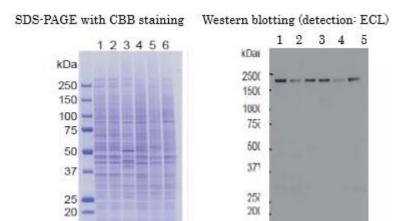


Fig.1 Weastern blot of RBP2 in crude cell extracts Samples:

- 1. HeLa control siRNA
- 2. HeLa RBP2 siRNA
- 3. MCF7
- 4. U2OS
- 5. NIH3T3
- 6. J1 (mouse ES)

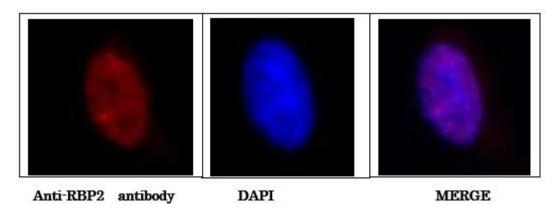


Fig.2 Immunofluorescence staining of HeLa cell with anti-RBP" antibody

- 1. HeLa cells were fixed with 4% paraformaldehyde overnight, permealized with 0.25% Triton X-100 in PBS for 10 min.
- 2. Incubate cells with 1.5% BSA in PBS for 30 min to block non-specific binding of the antibodies. Incubate the cells with 1/2,000 diluted anti-RBP2 antibody (18E8) in 1% BSA in PBS at  $4^{\circ}$ C overnight.
- 3. Incubate cells with a secondary antibody, goat anti-mouse IgG conjugated with Alex 488, at 1/1,000 dilution in 1% BSA for 1 hr at room temperature.
- 4. Nucleus (DNA) was stained with DAPI



**References:** This antibody has been used in the following publication.

1. Nishibuchi G et al. Physical and functional interactions between the histone H3K4 demethylase KDM5A and the nucleosome remodeling and deacetylase (NuRD) complex. J Biol Chem. 2014 Oct 17;289(42):28956-70. PMID: <u>25190814</u>