

# Product datasheet for TA160001

## **CAS9 Mouse Monoclonal Antibody**

## **Product data:**

#### OriGene Technologies, Inc.

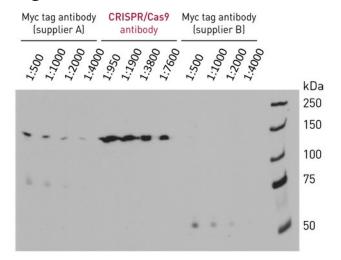
9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product Type:	Primary Antibodies
Applications:	IF, IP, WB
Recommended Dilution:	WB: 1:1000-5000, IP: 1:200, IF: 1:200
Reactivity:	Streptococcus Pyogenes
Host:	Mouse
lsotype:	lgG1, kappa
Clonality:	Monoclonal
Immunogen:	Monoclonal antibody raised in mouse against the Cas9 nuclease (CRISPR-associated protein 9)
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.2% (w/v) sodium azide.
Concentration:	lot specific
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Background:	The CRISPR/Cas9 (CRISPR-associated protein 9 nuclease) system uses a RNA-guided endonuclease technology which allows for inducing indel mutations, specific sequence replacements or insertions and large deletions or genomic rearrangements at any desired location in the genome. In addition, Cas9 can also be used to mediate up- or downregulation of specific endogenous genes or to alter histone modifications or DNA methylation.

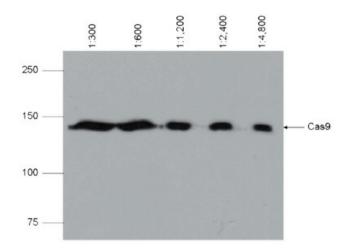


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### **Product images:**

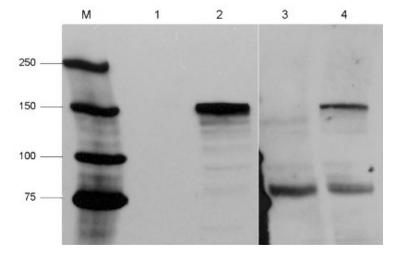


Western blot was performed on protein extracts from HEK293 cells transfected with a myc-tagged Cas9 using the CRISPR/Cas9 antibody as well as two commercially available purified monoclonal myc tag antibodies (supplier A and B). The three antibodies were used at different dilutions (antibody stocks: purified monoclonal Myc A 1ug/ul, Myc B 1ug/ul and Cas9 1.9 ug/ul). The ladder has been revealed by using the HRP coupled Blue ladder antibody. Exposure time was 1 hour.

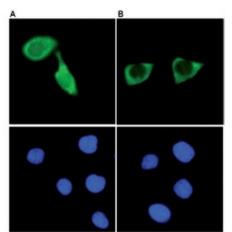


Western blot was performed on protein extracts from HEK293 cells transfected with a myc-tagged Cas9 using the Cas9 antibody. The antibody was used at different dilutions. The position of the myc-tagged Cas9 protein is indicated on the right; the marker (in kDa) is shown on the left.

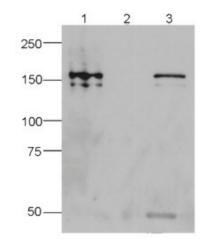
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Western blot was performed on protein extracts from HEK293 cells transfected with a myc-tagged Cas9. This figure shows the result of the WB on protein extracts from transfected (lane 2 and 4) and untransfected (lane 1 and 3) cells using the Cas9 antibody (lane 1 and 2) or an anti-myc antibody (lane 3 and 4). The marker lane (M) was incubated with Blue ladder - HRP antibody.



Hela cells were transiently transfected with a Flag-tagged Cas9 expression vector. 48 hours post transfection the cells were fixed in 3.7% formaldehyde, permeabilized in 0.5% Triton-X-100 and blocked in PBS containing 2% BSA for 2 hours at RT. The cells were stained with the Cas9 (A) or with an anti-Flag (B) antibody at 4C overnight, followed by incubation with an anti mouse secondary antibody coupled to AF488 for 1 h at RT. Nuclei were counter-stained with Hoechst 33342 (bottom).



IP was performed on whole cell extracts (100 ug) from HEK293 cells transfected with a Flag-tagged Cas9 using the Cas9 antibody. The immunoprecipitated proteins were subsequently analysed by Western blot with the antibody. Lane 3 shows the result of the IP; a negative IP control (IP on untransfected cells) and the input (15 ug) are shown in lane 2 and 1, respectively.

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