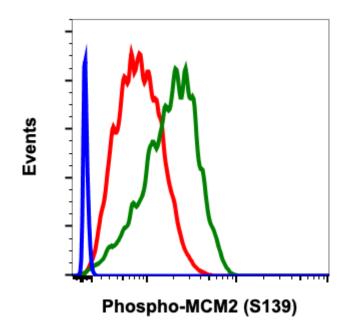
## **Catalog:** #2431

For Research Use Only. Not For Use In Diagnostic Procedures.

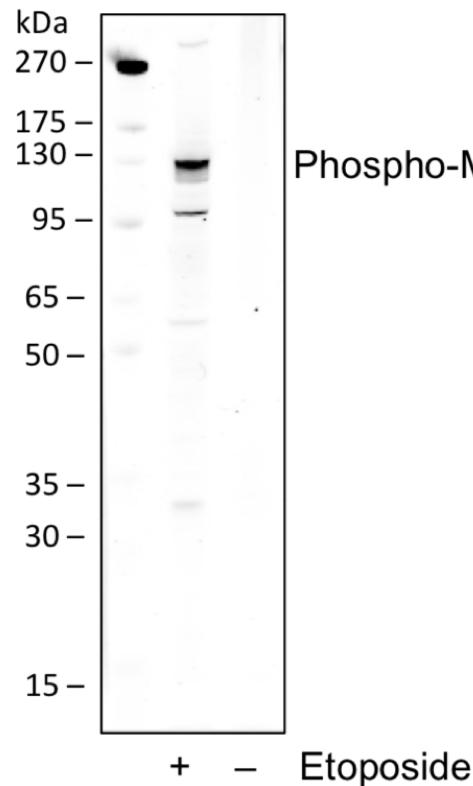
| <b>Applications</b><br>Flow Cytometry,WB | <b>Detection</b><br>Anti-Rabbit IgG   | <b>Clonality</b><br>Monoclonal     | <b>lsotype</b><br>Rabbit IgGk |  |  |
|--|---|------------------------------------|-------------------------------|--|--|
| Format:                                  | Unconjugated  |                                    |                               |  |  |
| Cross Reactivity:                        | Predicted to work with mouse, rat and other homologues.   |                                    |                               |  |  |
| Formulation:                             | 1X PBS, 0.02% NaN3, 50% Glycerol, 0.1% BSA  |                                    |                               |  |  |
| Preparation:                             | Protein A+G   |                                    |                               |  |  |
| Reactivity:                              | Human,Mouse,Rat   |                                    |                               |  |  |
| Recommended Usage:                       | $1\mu$ g/mL – 0.001 $\mu$ g/mL. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information.  |                                    |                               |  |  |
| Immunogen:                               | A synthetic phospho-peptide corresponding to residues surrounding Ser139 of human phospho MCM2  |                                    |                               |  |  |
| Description:                             | The members of minichromosome maintenance (McM) protein family 2-7 were originally identified as a group of proteins essential for DNA replication (chromosomal maintenance (1,2). They share common sequence homology to each other in their nulceotide-binding domains and are distinct subgroup of the large AAA ATPase family, which are required for the initiation and elongation of DNA replication. It has been reported that Cdc7/Dbf4 phospohrylates MCM2 during G1/S cell cycle which coincides with the initiation of DNA replication (3,4) |                                    |                               |  |  |
| References:                              | 1. Bell S.P. and Dutta A. (2002) Annu I<br>2. Chong J.P. et al., (2995) Natur 375:<br>3. Donovan S. et al., 1997) Proc Natl A<br>4. Tsuji T et al., (2006) Mol Biol Cell17  | 418-21.<br>Acad Sci USA, 94:5611-6 |                               |  |  |





Flow cytometric analysis of C6 cells, secondary antibody only negative control (blue) or untreated (red) or treated with staurosporine (green) using Phospho-MCM2 (Ser139) antibody MCM2S139-B12 at 0.01  $\mu$ g/mL. Cat. #2431.

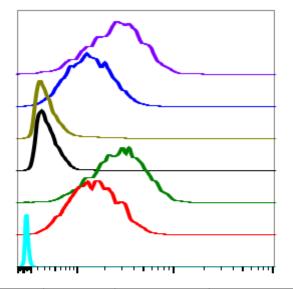




## Phospho-MCM2(S139)

Western blot analysis of L929 cell extract untreated or treated with 25uM etoposide using Phospho-MCM2 (Ser139) antibody MCM2S139-B12 at 0.05 ug/mL. Cat. #2431.

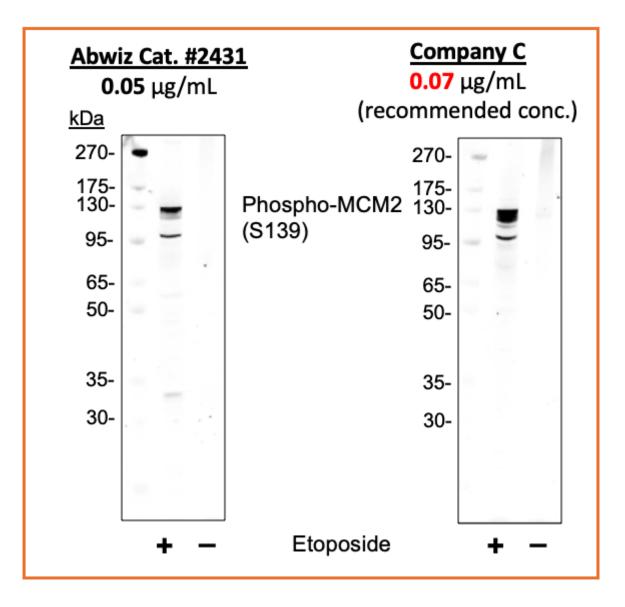




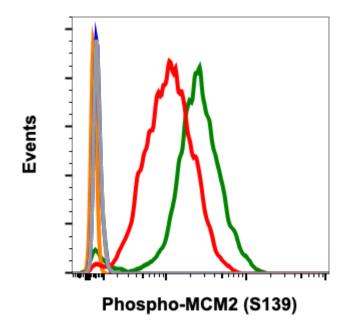
| lgG     | Treatment | Peptide Block | Median : BL1-A |
|---------|-----------|---------------|----------------|
| B12     | Staur     | Non-phos.     | 26783          |
| B12     | Ctrl      | Non-phos.     | 13392          |
| B12     | Staur     | Phospho.      | 3246           |
| B12     | Ctrl      | Phospho.      | 3303           |
| B12     | Staur     | -             | 28502          |
| B12     | Ctrl      | -             | 15243          |
| 2' only | Ctrl      | -             | 369            |

Peptide blocking flow cytometric analysis of C6 cells secondary antibody only negative control (light blue) or untreated (red) or treated with staurosporine (green) or untreated and blocked with phospho-peptide (black) or treated and blocked with phospho peptide (gold) or untreated and blocked with non-phospho peptide (dark blue) or treated and blocked with non-phospho peptide (purple) using Phospho-MCM2 (Ser139) antibody MCM2S139-B12 at 0.1 µg/mL. Cat. #2431.





Western blot analysis of L929 cell extract untreated or treated with etoposide using 0.05 ug/mL Phospho-MCM2 (Ser139) antibody MCM2S139-B12. Cat.#2431 or Company C antibody at 0.07 ug/mL (manufacturer's recommended concentration) developed using the same exposure.





Flow cytometric analysis of A431 cells, secondary antibody only negative control (blue), or untreated (grey) or treated with staurosporine (orange) using 0.01 ug/mL isotype control Cat. #2141, or untreated (red) or treated (green) using Phospho-MCM2 (Ser139) antibody MCM2S139-B12 at 0.01 µg/mL. Cat. #2431.

