

## 12-4329: Phospho-MCM2 (Ser139) (Clone: B12) rabbit mAb

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	MCM2S139-B12
<b>Application :</b>	FACS,WB
<b>Reactivity :</b>	Human, Mouse, Rat
<b>Conjugate :</b>	Unconjugated
<b>Format :</b>	Purified
<b>Alternative Name :</b>	DNA replication licensing factor MCM2, Minichromosome maintenance protein 2 homolog, Nuclear protein BM28, CCNL1, CDCL1, KIAA0030
<b>Isotype :</b>	Rabbit IgG1k
<b>Immunogen Information :</b>	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 nucleotide-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 phosphorylates MCM2 during G1/S cell cycle which coincides with the initiation of DNA replication (3,4)

### Product Info

<b>Amount :</b>	20 $\mu$ l / 200 $\mu$ l
<b>Content :</b>	1X PBS, 0.02% NaN <sub>3</sub> , 50% Glycerol, 0.1% BSA
<b>Storage condition :</b>	Store at -20°C. Avoid repeated freeze and thaw cycles.

### Application Note

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.(0.5mg/ml, more than 200 western blots)

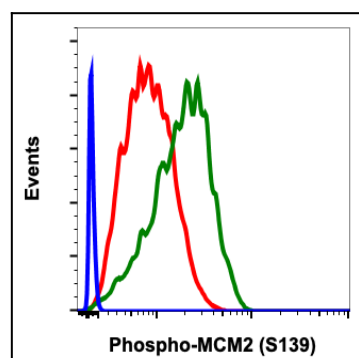


Fig-1: Flow cytometric analysis of C6 cells, secondary antibody only negative control (blue) or untreated (red) or treated with staurosporine (green) using Phospho-MCM2 (Ser139) antibody MCM2S139-B12 at 0.01  $\mu$ g/mL.

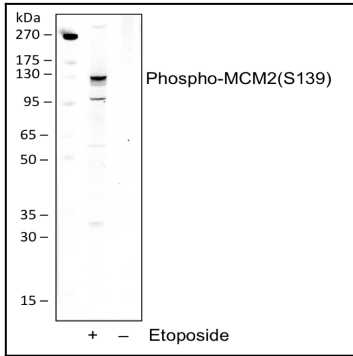


Fig 2 : Western blot analysis of L929 cell extract untreated or treated with 25uM etoposide using Phospho-MCM2 (Ser139) antibody MCM2S139-B12 at 0.05  $\mu\text{g}/\text{mL}$ .

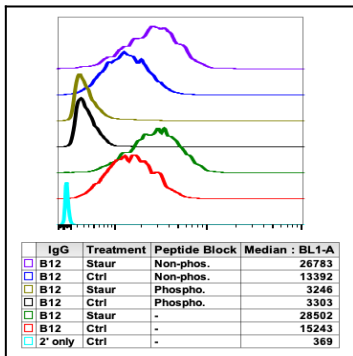


Fig-3: Peptide blocking flow cytometric analysis of C6 cells secondary antibody only negative control (light blue) or untreated (red) or treated with staurosporine (green) or untreated and blocked with phospho-peptide (black) or treated and blocked with phospho peptide (gold) or untreated and blocked with non-phospho peptide (purple) using Phospho-MCM2 (Ser139) antibody MCM2S139-B12 at 0.1  $\mu\text{g}/\text{mL}$ .

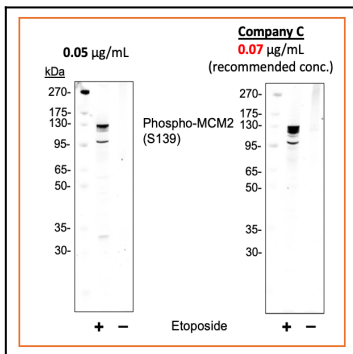


Fig-4: Western blot analysis of L929 cell extract untreated or treated with etoposide using 0.05  $\mu\text{g}/\text{mL}$  Phospho-MCM2 (Ser139) antibody MCM2S139-B12. Company C antibody at 0.07  $\mu\text{g}/\text{mL}$  (manufacturer's recommended concentration) developed using the same exposure.

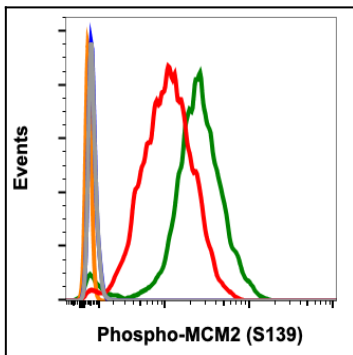


Fig-5: Flow cytometric analysis of A431 cells, secondary antibody only negative control (blue), or untreated (grey) or treated with staurosporine (orange) using 0.01  $\mu\text{g}/\text{mL}$  isotype control or untreated (red) or treated (green) using Phospho-MCM2 (Ser139) antibody MCM2S139-B12 at 0.01  $\mu\text{g}/\text{mL}$ .