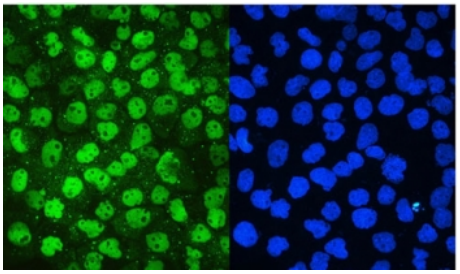
# MCM2 Antibody (RQ5591)

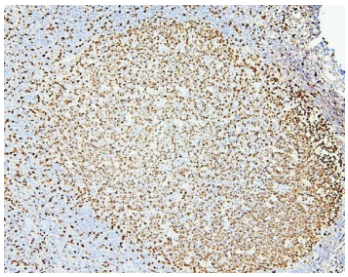
| Catalog No. | Formulation | Size |
|---|---|---|
| RQ5591 | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

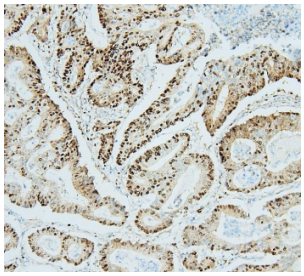
| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human, Mouse, Rat |
| **Format** | Antigen affinity purified |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit IgG |
| **Purity** | Affinity purified |
| **Buffer** | Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide |
| **UniProt** | P49736 |
| **Localization** | Nuclear |
| **Applications** | Western Blot : 0.25-0.5ug/ml<br>Immunohistochemistry (FFPE) : 1-2ug/ml<br>Immunocytochemistry : 0.5-1ug/ml<br>Flow Cytometry : 1-3ug/million cells<br>Direct ELISA : 0.1-0.5ug/ml |
| **Limitations** | This MCM2 antibody is available for research use only. |



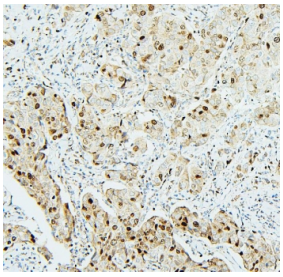
IF/ICC staining of FFPE human A431 cells with MCM2 antibody (green) at 2ug/ml and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



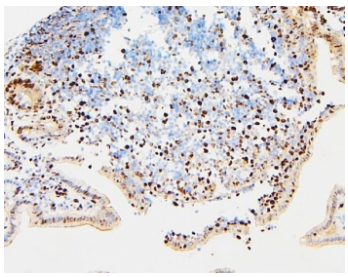
IHC staining of FFPE human tonsil with MCM2 antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.



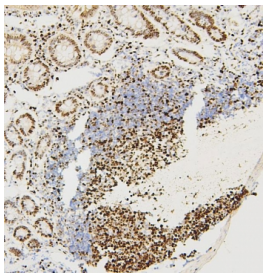
IHC staining of FFPE human intestinal cancer with MCM2 antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.



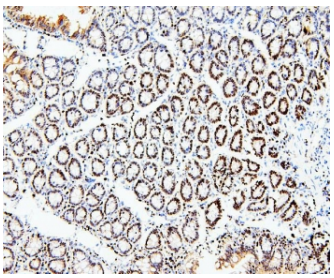
IHC staining of FFPE human breast cancer with MCM2 antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.



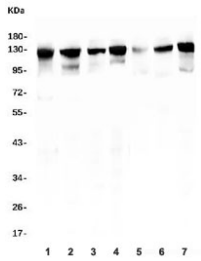
IHC staining of FFPE mouse lymph tissue with MCM2 antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.



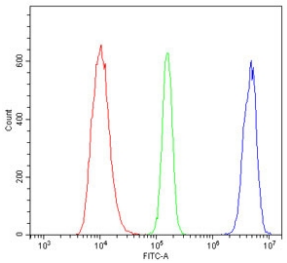
IHC staining of FFPE rat lymph tissue with MCM2 antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.



IHC staining of FFPE rat intestinal tissue with MCM2 antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.




Western blot testing of human 1) Caco-2, 2) HEK293, 3) ThP-1, 4) K562, 5) rat ovary, 6) mouse ovary and 7) mouse NIH 3T3 lysate with MCM2 antibody. Predicted molecular weight: 100~130 kDa.




Flow cytometry testing of human HL-60 cells with MCM2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= MCM2 antibody.

## Description

MCM2 (MINICHROMOSOME MAINTENANCE, S. CEREVISIAE, HOMOLOG OF, 2), also known as MITOTIN, CDCL1 or BM28, is a human nuclear protein that plays an important role in 2 crucial steps of the cell cycle, namely, onset of DNA replication and cell division. And it is similar to members of the family of early S-phase proteins. The MCM2 gene is mapped to 3q21.3. The hexameric protein complex formed by MCM proteins is a key component of the pre-replication complex (pre-RC) and may be involved in the formation of replication forks and in the recruitment of other DNA replication related proteins. In the G0 stage, the MCM2 and MCM5 proteins were much less abundant than the MCM7 and MCM3 proteins, which suggests that the MCM proteins are not present in stoichiometric amounts and that only a proportion of these molecules actively participate in cell cycle regulation as part of MCM complexes.

## Application Notes

Optimal dilution of the MCM2 antibody should be determined by the researcher.

## Immunogen

A human recombinant protein (amino acids S393-R850) was used as the immunogen for the MCM2 antibody.

## Storage

After reconstitution, the MCM2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.