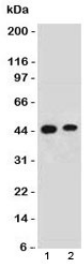
# EMI1 Antibody / Mitotic Progression Regulator Antibody [clone FBXP5] (V7090)

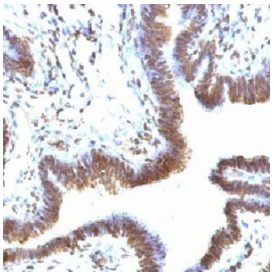
| Catalog No. | Formulation | Size |
|---|---|---|
| V7090-100UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 100 ug |
| V7090-20UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 20 ug |
| V7090SAF-100UG | 1 mg/ml in 1X PBS; BSA free, sodium azide free | 100 ug |
| V7090IHC-7ML | Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only* | 7 ml |

## Bulk quote request

| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human |
| **Format** | Purified |
| **Host** | Mouse |
| **Clonality** | Monoclonal (mouse origin) |
| **Isotype** | Mouse IgG2a, kappa |
| **Clone Name** | FBXP5 |
| **Purity** | Protein G affinity chromatography |
| **UniProt** | Q9UKT4 |
| **Localization** | Nuclear |
| **Applications** | Western blot: 1-2ug/ml<br>Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT<br>Prediluted IHC only format: incubate for 30 min at RT (1) |
| **Limitations** | This EMI1 Antibody / Mitotic Progression Regulator Antibody is available for research use only. |




EMI1 Antibody HeLa and 293 WB. Western blot analysis of human 1) HeLa and 2) 293 cell lysates using EMI1 Antibody / Mitotic Progression Regulator Antibody demonstrates distinct bands at approximately 45-50 kDa, consistent with the predicted molecular weights of Early mitotic inhibitor 1 / FBXO5 isoforms 1 and 2. The observed expression pattern aligns with the role of EMI1 as a regulator of APC/C-associated signaling, mitotic progression, and proliferative cell cycle control.



EMI1 Antibody Ovarian Carcinoma IHC. Immunohistochemistry analysis of FFPE human ovarian carcinoma tissue stained with EMI1 Antibody / Mitotic Progression Regulator Antibody clone FBXP5 demonstrates strong predominantly nuclear HRP-DAB brown staining within malignant epithelial cell populations, consistent with the role of Early mitotic inhibitor 1 / FBXO5 in proliferative signaling, APC/C-associated checkpoint regulation, and mitotic progression control. The nuclear-predominant staining pattern aligns with the function of EMI1 as a cell cycle regulatory protein involved in maintenance of orderly mitotic progression and genomic stability. Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.

## Description

F-box only protein 5 (FBXO5), commonly known as Early mitotic inhibitor 1 (EMI1), is a cell cycle-associated regulatory protein involved in control of mitotic progression, APC/C inhibition, and replication-associated signaling pathways. The EMI1 Antibody / Mitotic Progression Regulator Antibody clone FBXP5 is designed for detection of EMI1 expression in studies involving proliferative signaling, checkpoint regulation, and tumor-associated cell cycle activity.

EMI1 functions as a negative regulator of the anaphase-promoting complex/cyclosome, a multiprotein ubiquitin ligase complex responsible for degradation of cyclins and mitotic regulatory proteins during cell cycle progression. Through inhibition of APC/C activity, EMI1 helps preserve proteins required for orderly transition through S phase and mitosis. Proper EMI1 expression therefore contributes to maintenance of genomic stability and coordinated progression through proliferative cellular states.

The FBXO5 gene is located on chromosome 6q25 and encodes a protein containing regulatory motifs involved in ubiquitin-mediated signaling pathways. EMI1 expression is typically associated with actively cycling cells and proliferative tissue compartments, with accumulation occurring during interphase and degradation during mitotic progression. Dysregulated EMI1 expression has been linked to replication stress, chromosomal instability, and tumor-associated proliferative signaling in multiple cancer models.

In cancer biology, EMI1 has attracted interest due to its relationship with genomic instability and mitotic checkpoint control mechanisms. Elevated EMI1 expression has been reported in several tumor types and may reflect altered proliferative signaling states within malignant cell populations. Because EMI1 participates in pathways governing cyclin stability and APC/C-associated regulation, the protein is frequently studied alongside markers of cell cycle progression and mitotic activity.

Western blot analysis using EMI1 antibodies commonly demonstrates bands within the expected molecular weight range for endogenous EMI1 protein, while immunohistochemical staining may reveal increased expression in proliferative epithelial and tumor-associated cellular compartments. The clone FBXP5 monoclonal antibody supports research applications involving cell cycle biology, checkpoint signaling, mitotic regulation, and cancer-associated proliferative pathways.

For highly selective detection of EMI1 in cell cycle checkpoint and APC/C-associated signaling studies, see the EMI1 Antibody / Cell Cycle Checkpoint Regulator Antibody clone EMI1/1176 featuring protein microarray specificity validation.

## Application Notes

Optimal dilution of the EMI1 Antibody / Mitotic Progression Regulator Antibody should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

## Immunogen

A human partial recombinant N-terminal protein fragment was used as the immunogen for the EMI-1 antibody.

## Storage

Store the EMI-1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

## Alternate Names

EMI1 antibody, FBXO5 antibody, Early mitotic inhibitor 1 antibody, Mitotic progression regulator antibody, Cell proliferation marker antibody


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