

## Cig2 Antibody [clone 3A11/5] (V8291)

| Catalog No.    | Formulation  | Size   |
|----------------|--|--------|
| V8291-100UG    | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 100 ug |
| V8291-20UG     | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 20 ug  |
| V8291SAF-100UG | 1 mg/ml in 1X PBS; BSA free, sodium azide free                             | 100 ug |

### Bulk quote request

|                           |  |
|---------------------------|--|
| <b>Availability</b>       | 1-3 business days  |
| <b>Species Reactivity</b> | Schizosaccharomyces pombe  |
| <b>Format</b>             | Purified   |
| <b>Host</b>               | Mouse  |
| <b>Clonality</b>          | Monoclonal (mouse origin)  |
| <b>Isotype</b>            | Mouse IgG1, kappa  |
| <b>Clone Name</b>         | 3A11/5   |
| <b>Purity</b>             | Protein G affinity chromatography                                      |
| <b>UniProt</b>            | P36630   |
| <b>Applications</b>       | ELISA (order BSA-free Format For Coating) :<br>Western Blot : 1-2ug/ml |
| <b>Limitations</b>        | This Cig2 antibody is available for research use only.                 |



## Description

Cig2 is a cyclin that functions as the catalytic subunit of cyclin-dependent kinases (Cdks) in the fission yeast

*Schizosaccharomyces pombe*. It is a B-type, S phase cyclin that is required for both the G1/S and G2/M cell cycle transitions and is expressed in a sharp spike that peaks during the G1/S period. Cig2 binds to Cdc2 (Cdk), and the resulting Cdc2/Cig2 complex controls the G1/S transition of the cell cycle. Disruption of Cig2 delays the onset of mitosis. The expression of the Cig2 gene is dependent on Mlu1-binding factor (MBF), and the protein is destroyed during anaphase by the APC/cyclosome (APC/C) and Skp1/Cullin-1/F-box (SCF), thereby ensuring the spike expression pattern of Cig2. SCF regulates Cig2 levels in a dual manner, transcriptionally and post-translationally, while APC/C only destroys the protein.

## Application Notes

Optimal dilution of the Cig2 antibody should be determined by the researcher.

## Immunogen

Bacterial *S. pombe* Cig2 purified protein was used as the immunogen for the Cig2 antibody.

## Storage

Store the Cig2 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).