**UniProt Summary**

**Primary Accession:** Q9UJX6

Component of the anaphase promoting complex/cyclosome (APC/C), a cell cycle-regulated E3 ubiquitin ligase that controls progression through mitosis and the G1 phase of the cell cycle. The APC/C complex acts by mediating ubiquitination and subsequent degradation of target proteins; it mainly mediates the formation of 'Lys-11'-linked polyubiquitin chains and, to a lower extent, the formation of 'Lys-48' and 'Lys-63' linked polyubiquitin chains. The CDC20-APC/C complex positively regulates the formation of synaptic vesicle clustering at active zone to the presynaptic membrane in postmitotic neurons. CDC20-APC/C-induced degradation of NEUROD2 drives presynaptic differentiation. Protein...

**Physical Characteristics**

**Quantity:** 1 ml (culture supernatant) or 100ug at 1mg/ml (purified)

**Format:** culture supernatant or purified material

**Host/Isotype:** mouse IgG2a

**Clonality:** monoclonal; ID R354.2.3H7

**Formulation:** culture supernatant contains 0.02% NaN3. Purified material contains 30% glycerol, PBS and 0.02% NaN3

**Specificity:** monospecific for human ANAPC2; see "Microarray Analysis" below

**Reactivity:** human; not tested for cross reactivity in other species

**Stability/Storage:** 12 months long term: -20°C; short term: 4°C; avoid freeze-thaw cycles; aliquot as required

**Handling Notes:** small volumes of antibody may occasionally become entrapped in the seal of the product vial during shipment and storage; briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container cap

**Tested Research Applications**

- Western Immunoblotting - PASS by SOP
- Immunoprecipitation - PASS by SOP

Antibody tested as purified IgG. Optimal dilution to be determined by user.

**Quality Assurance**

**Notes:**

1. Please refer to the SOP manual [click here](#) for detailed explanation of the experimental setup and thresholds used to evaluate the results shown below.

2. Predicted MW of the target protein expressed in the western immunoblotting (WB) and immunoprecipitation (IP) experiment is 90.53kDa and the three fusion tags (venus, 3xFLAG, V5) adds another 38.7kDa to this protein. Therefore the protein is expected to migrate ~129.23kDa in a denatured SDS-PAGE gel.

3. See results below for any applicable cautionary notes.
Anti-Human ANAPC2, monoclonal

Alternate Names: Anaphase-promoting complex subunit 2

Cat. No. 14-087

FOR RESEARCH USE ONLY NOT FOR USE IN HUMANS

Quality Assurance (HuProt™ Array)

About Z and S Scores: The z-score represents the strength of a signal that a mAb (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SDs) above the mean value of all signals generated on that array. To be considered a definite binding event between a mAb and a protein target, the z-score must have a value of at least 2.5 (SDs above the mean). The s-score represents the relative target specificity of a mAb, and is the difference (also in units of SDs) between the z-score a mAb generates upon binding to one protein and the next highest z-score that the mAb generates against another protein. For example, if a mAb binds to protein X with a z-score of 43 and to protein Y with a z-score of 14, then the s-score for the binding of that mAb to protein X is equal to 29.

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<th>Rank</th>
<th>Protein</th>
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Anti-Human ANAPC2, monoclonal

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Quality Assurance (continued)

IMMUNOPRECIPITATION - Predicted MW 129.23kDa WESTERN BLOT - Predicted MW 129.23kDa

Tet-ON HeLa cells were transfected with construct encoding ANAPC2 (NM_013366.3) with an N-terminal fusion of FLAG, YFP (Venus), and V5 tags under a tet-inducible promoter. These cells were stimulated with 0, 50 or 1000 ng/ml doxycycline. Immunoprecipitation (IP) was carried out using 5µg of either IgG, CDI mAb Anti-ANAPC2 (cloneID# R354.2.3H7) or 1 µg of FLAG-M2 (Sigma). Immunoblotting was performed using rabbit Anti-FLAG (1:1000, Cell Signaling #2368). We observe that such fusion proteins are generally expressed as a doublet, with the upper band corresponding to the expected size of the ANAPC2 with an N-terminal fusion of FLAG, YFP (Venus) and V5 tags.

Cautionary notes for IP and WB experiments:

1. Significant signal in IgG lane

Tet-ON HeLa cells were transfected with construct encoding ANAPC2 (NM_013366.3) with an N-terminal fusion of FLAG, YFP (Venus) and V5 tags under a tet-inducible promoter. These cells were stimulated with 0, 50 or 1000 ng/ml doxycycline. Immunoprecipitation (IP) was carried out using 5µg of either IgG, CDI mAb Anti-ANAPC2 (cloneID# R354.2.3H7) or 1 µg of FLAG-M2 (Sigma). Immunoblotting was performed using 0.2µg/ml CDI mouse mAb Anti-ANAPC2 (cloneID# R354.2.3H7). HC=Heavy chain.