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# Product Information

**Anti-EIF2C3/Ago3**
produced in rabbit, affinity isolated antibody

Catalog Number **SAB4200112**

## Product Description

Anti-EIF2C3/Ago3 is developed in rabbit using as immunogen a synthetic peptide corresponding to amino acids 13-25 of human EIF2C3/Ago3 (GeneID 192669) conjugated to KLH. The corresponding sequence differs by one or two amino acid in rat and mouse, respectively. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-EIF2C3/Ago3 recognizes human EIF2C3/Ago3. The antibody may be used in several immunochemical techniques including immunoblotting (~97 kDa), immunoprecipitation, and immunofluorescence. Detection of the EIF2C3/Ago3 band by immunoblotting is specifically inhibited with the immunizing peptide.

The Argonaute proteins are evolutionarily conserved between species, and have been implicated in both transcriptional and post-transcriptional gene silencing. Many organisms encode multiple members of the family, which can be subdivided into the Ago subfamily and the Piwi subfamily. Ago proteins are ubiquitously expressed, and bind to siRNAs or miRNAs to guide gene silencing; whereas, the Piwi proteins expression is restricted mostly to the germ line.

Argonaute proteins (molecular mass ~100 kDa) are characterized by piwi-argonaute-zwille (PAZ) and PIWI domains. In humans, the Ago subfamily consists of four members, hAgo1–4; however, only hAgo2 has been shown to have slicing activity. Both hAgo2 and Ago3 associate primarily with miRNA. Ago proteins localize to the cytoplasm of somatic cells and are concentrated in cytoplasmic processing bodies. A member of this group, Ago1, is also known to be associated with the Golgi and endoplasmic reticulum. The gene is located on chromosome 1 in a cluster of closely related family members including Ago 1 and Ago 4. Interestingly, this region is often lost in Wilms' tumors, which are hypothesized to be caused by defects in embryonic kidney development that disturb the capacity of metanephrogenic precursor cells to differentiate.[1-4]

## Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~1.0 mg/mL

## Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

## Storage/Stability

For continuous use, store at 2–8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing is not recommended. Storage in "frost-free" freezers is also not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

## Product Profile

Immunoblotting: a working antibody concentration of 0.5–1 µg/mL is recommended using lysates of HEK-293T cells over expressing human EIF2C3/Ago3.

Immunoprecipitation: a working antibody amount of 2.5–5 µg is recommended using lysates of HEK-293T cells over expressing human EIF2C3/Ago3.

Immunofluorescence: a working antibody concentration of 2.5–5 µg/mL is recommended using para-formaldehyde fixed HEK-293T cells overexpressing human EIF2C3/Ago3.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

**References**


1. Hock, J., and Meister, G., *Genome Biol.*, **9**, 210.1–210.8 (2008).
2. Peters, L., and Meister, G., *Mol. Cell,* **26**, 611–623 (2007).
3. Carmell, M.A., et al., *Genes Dev.,* **16**, 2733-2742 (2002).
4. Azuma-Mukai, A., et al., *Proc. Natl. Acad. Sci. USA*, **105**, 7964-7969 (2008).


SG,GG,TD,KAA,MAM 06/10-1