

product **AS09 527-100**
AGO1 | argonaute 1 (100 µg)

product information

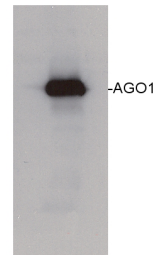
background	AGO1 belongs to a group of argonaute proteins which are catalytic component of the RNA-includes silencing complex (RISC). This protein complex is responsible for the gene silencing (RNAi).
immunogen	N-terminal peptide of <i>Arabidopsis thaliana</i> AGO1 O04379 , At1g48410
antibody format	rabbit polyclonal affinity purified serum lyophilized
quantity	2 x 50 µg for reconstitution add 50 µl of sterile water to each tube.
storage	store lyophilized/reconstituted at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please, remember to spin tubes briefly prior to opening them to avoid any losses that might occur from lyophilized material adhering to the cap or sides of the tubes.
tested applications	western blot (WB)
related products	AS09 527P AGO1 argonaute 1 Blocking peptide AS09 617 AGO4 argonaute 4, rabbit antibody AS10 672 AGO6 argonaute 6, rabbit antibody AS10 673 AGO9 argonaute 9, rabbit antibody collection of antibodies to micro RNA Recommended secondary antibody for ECL detection
additional information	antibody binds microRNA and tasiRNAs, preference for 21nt miRNAs with 5'U

application information

recommended dilution	1: 5000 - 1: 10 000 (ECL Plus)
expected apparent MW	116.4 130 kDa
confirmed reactivity	<i>Arabidopsis thaliana</i> , <i>Nicotiana benthamiana</i>
predicted reactivity	<i>Pisum sativum</i> , <i>Ricinus communis</i> , <i>Vitis vinifera</i> , <i>Capsella rubella</i> , <i>Brassica pekinensis</i>
not reactive in	<i>Chlamydomonas reinhardtii</i>
additional information	AGO expression may be tissue specific and using floral tissue is recommended where most of the AGOs are expressed the highest. Use of proteasome inhibitors as MG132 can help to stabilize AGO proteins during extraction procedure. The AGO1 antibody is extremely specific to AGO1 and does not cross-react with other antibodies. The evidence is 1) the peptide to which it was raised is at the very N-terminus of the protein and is not present in other AGOs 2) aAGO1 does not cross react with the AGOs which are overexpressed (AGO2, AGO3, AGO4, AGO5, AGO6, AGO9) using a western blot.
selected references	Minoia et al. (2014) . Specific Argonautes Selectively Bind Small RNAs Derived from Potato Spindle Tuber Viroid and Attenuate Viroid Accumulation In Vivo. J Virol. 2014 Oct 15;88(20):11933-45. doi: 10.1128/JVI.01404-14. Epub 2014 Aug 6.

application example

80 µg of *Arabidopsis thaliana* soluble total cell extract (extracted in 20 mM Tris pH 7.5, 5mM MgCl₂, 2.5mM DTT, 300 mM NaCl, 0.1% NP-40, 1% protease inhibitor MG132) was separated on 6% SDS-PAGE and blotted 1h to nitrocellulose. Filters were blocked 1h with 5% low-fat milk powder in TBS-TT (0.25% TWEEN20; 0.1% Triton-X) and probed with anti-AGO1 antibody (1:10 000, 1h) and secondary anti-rabbit (1:10000, 1 h) antibody (HRP conjugated, Santa Cruz(sc-2054)) in TBS-TT containing 5% low fat milk powder. Antibody incubations were followed by washings in TBS-TT. All steps were performed at RT with agitation. Blots were developed for 5 min with ECL-PLUS detection reagent according to the manufacturer's instructions (GE Healthcare). Exposure time was 5 seconds.



Courtesy Dr. Ericka Havecker, University of Cambridge