

product **AS09 580**

aadA1 | aminoglycoside adenytransferase (chloroplast transformation marker)

product information

background	aadA - aminoglycoside 3"adenyltransferase is an enzyme with nucleotidyltransferase activity. Plastid transformation in tobacco involves expression of aadA cassette, which confers resistance to spectinomycin and streptomycin and allows for transformant selection.
immunogen	<u>KLH</u> -conjugated peptide derived from known aadA1 sequences
antibody format	rabbit; polyclonal; affinity purified serum; lyophilized
quantity	200 µg - for reconstitution add 200 µl of sterile water
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)
additional information	to be added when available

application information

recommended dilution	1: 3 000 with standard ECL (WB)
expected apparent MW	30 30 kDa
confirmed reactivity	aadA cassette in <i>Nicotiana tabacum</i> , <i>Chlamydomonas reinhardtii</i>
predicted reactivity	aadA cassette
not reactive in	no confirmed exceptions from predicted reactivity known in the moment
additional information	to be added when available
selected references	to be added when available, antibody available in July 2010

application example

Solubilized whole *Chlamydomonas reinhardtii* cells (**1,2**) (corresponding to 10 µg of chlorophyll) and soluble extracts of *Nicotiana tabaccum* leaves (**3,4**) were separated on a 15% acrylamide gel containing 8M urea, transferred on nitrocellulose membrane, incubated with anti-aad1 antibodies in 1: 5000 dilution for 1 h in RT, followed by washes and incubation with a secondary anti-rabbit IgG antibody in 1: 10 000 dilution) and revealed by ECL (GE Healthcare; 3 min exposure). Tested *Chlamydomonas reinhardtii* and *Nicotiana tabaccum* strains expressed (+) or not (-) the aadA cassette.

AadA protein in *Chlamydomonas reinhardtii* migrates more slowly than its *Nicotiana tabaccum* counterpart as it also includes the 27 first residues of the atpA coding sequence.

Courtesy of Drs Y.Choquet, K. Wostrikoff and D. Drapier, CNRS, France

