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This product is **for research use only** (not for diagnostic or therapeutic use) **contact: support@agrisera.com**

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**Product no AS15 3104**

# DRB4 | Double-stranded RNA-binding protein 4

## Product information

| | |
|---|---|
| **Immunogen** | KLH-conjugated peptide derived from *Arabidopsis thaliana* DRB4 sequence, Uniprot: Q8H1D4, TAIR: At3g62800 |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Purity** | Immunogen affinity purified serum in PBS pH 7.4. |
| **Format** | Lyophilized |
| **Quantity** | 50 µl |
| **Reconstitution** | For reconstitution add 50 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 the tubes briefly prior to opening them to avoid any losses that might occur from material adhering to the cap or sides of the tube. |

## Application information

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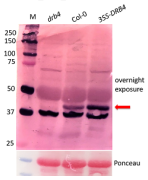
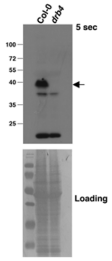
| **Recommended dilution** | 1 : 1000-1 : 5000 |
| **Expected \| apparent MW** | 38,4 \| 40 kDa |
| **Confirmed reactivity** | *Arabidopsis thaliana* |
| **Predicted reactivity** | *Brassica napus,Brassica oleracea, Camelina sativa, Capsella rubella, Eutrema salsugineum*<br>Species of your interest not listed? Contact us |
| **Not reactive in** | No confirmed exceptions from predicted reactivity are currently known |

## Application example




100 µg of total protein from *Arabidopsis thaliana* wt, *drb4*, and *35S-DRB4* leaves extracted with isolation buffer (50 mM Tris-HCl, pH 7.5, 10% glycerol, 150 mM NaCl, 10 mM $MgCl_2$, 5 mM EDTA, 5 mM DTT, and 1 X protease inhibitor cocktail (Sigma-Aldrich, St. Louis, MO) and denatured by boiling at 100°C. The proteins were separated on 10% SDS-PAGE and blotted 1.5 hrs to PVDF membrane using wet transfer. Blots were blocked with 5% milk powder for 30 min at room temperature (RT) with agitation. Blot was incubated in the primary antibody at a dilution of 1: 1,000 for 60 min at RT with agitation. The antibody solution was decanted and the blot was rinsed briefly twice, then washed 3 times for 10 min in phosphate buffer (containing 0.1% Tween 20) at RT with agitation. Blot was incubated in secondary antibody (anti-rabbit IgG alkaline phosphatase conjugated) diluted to 1:10,000 for 120 min at RT with agitation. The blot was washed as above and developed with NBT/BCIP (Fisher Chemicals) using Alkaline phosphatase detection system. The DRB4 specific band was seen within 20 mins and showed a better signal when allowed to develop for longer duration (overnight in this case).

Courtesy of Dr. Gah-hyun Lim and Prof. Pradeep Kachroo, University of Kentucky, Lexington, USA



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300 µg of total protein from *Arabidopsis thaliana* Col-0 and *drb4* mutant flowers, extracted according to Hurkman and Tanaka (Plant Physiol. 1986 Jul; 81(3):802-6) and denatured with WB loading buffer at 95°C for 5 min, were separated on 15% SDS-PAGE and blotted 90 min to PVDF membrane using wet transfer. Blots were blocked with 5% milk powder in PBS, Tween 20 0.1% for 30 min at room temperature (RT) with agitation. Blot was incubated in the primary antibody at a dilution of 1:5000 overnight at 4°C with agitation. The antibody solution was decanted and the blot was washed 4 times for 10 min in PBS Tween20 0.1% at RT with agitation. Blot was incubated in secondary antibody (goat anti-rabbit IgG horse radish peroxidase conjugated, provided by Agrisera) diluted to 1:25000 in PBS 1x, Tween 20 0.1%, milk powder 5% for 3h30 at RT with agitation. The blot was washed as above, incubated for 3 min with Lumi-Light$^{PLUS}$ Western Blotting Substrate (Roche) and revealed using X-ray films. Exposure time was 5 seconds.

Courtesy of Dr. Patrice Dunoyer, Institut de Biologie Moléculaire des Plantes du CNRS (IBMP-CNRS), France