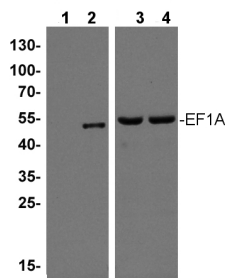


Product no **AS11 1633****EF1A | Elongation factor 1-alpha / EF-1-alpha****Product information**

| | |
|-----------------------|---|
| Immunogen | Full length, recombinant EF1A of <i>Arabidopsis thaliana</i> UniProt: P0DH99-1 , TAIR: AT1G07940 |
| Host | Rabbit |
| Clonality | Polyclonal |
| Purity | Serum |
| Format | Lyophilized |
| Quantity | 200 µl |
| Reconstitution | 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 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

| | |
|-------------------------------|---|
| Recommended dilution | 1 : 1000 (WB) |
| Expected apparent MW | 49,5 kDa |
| Confirmed reactivity | <i>Arabidopsis thaliana</i> , <i>Oryza sativa</i> , <i>Triticum aestivum</i> |
| Predicted reactivity | <i>Brassica napus</i> , <i>Nicotiana benthamiana</i> , <i>Nicotiana tabacum</i> , <i>Picea sitchensis</i> , <i>Populus trichocarpa</i> , <i>Solanum lycopersicum</i> , <i>Solanum tuberosum</i> , <i>Sorghum bicolor</i> , <i>Zea mays</i> Species of your interest not listed? Contact us |
| Not reactive in | <i>Chlamydomonas reinhardtii</i> , Recombinant wheat EF1A |
| Selected references | Markovi? et al. (2021) Correlation of elongation factor 1A accumulation with photosynthetic pigment content and yield in winter wheat varieties under heat stress conditions, <i>Plant Physiology and Biochemistry</i> , Volume 166, 2021, Pages 572-581, ISSN 0981-9428, https://doi.org/10.1016/j.plaphy.2021.06.035 . (https://www.sciencedirect.com/science/article/pii/S098194282100348X) Djuki? et al. (2019). Resolving subcellular plant metabolism. <i>Plant J.</i> 2019 Jul 30. doi: 10.1111/tpj.14472. Zhen et al. (2018). 2D-DIGE comparative proteomic analysis of developing wheat grains under high-nitrogen fertilization revealed key differentially accumulated proteins that promote storage protein and starch biosyntheses. <i>Anal Bioanal Chem.</i> 2018 Jul 30. doi: 10.1007/s00216-018-1230-4. Wang et al. (2016). GOLGI TRANSPORT 1B Regulates Protein Export from the Endoplasmic Reticulum in Rice Endosperm Cells. <i>Plant Cell.</i> 2016 Nov;28(11):2850-2865. (<i>Oryza sativa</i> , western blot) |

application example

10 µg total protein extracted from 15 day old *Arabidopsis thaliana* seedlings that were either kept at 22°C (**3**) or heat treated at 38°C for 2 hours prior to protein extraction (**4**). As positive control 10 ng of recombinant AtEF1A (**2**) were separated side by side with the plant samples on 10-15 % gradient SDS-PAGE and blotted to nitrocellulose (Bio-rad). Blots were blocked following transfer with 5% low fat milk in low salt buffer for 1h at room temperature with agitation. Blots were incubated in the primary antibody at a dilution of 1: 1000 for O/N 4°C with agitation in the blocking solution. The primary antibody solution was removed and the blot was rinsed briefly twice, then washed 4 times for 15 min each at room temperature with agitation using low salt buffer. Blots were incubated in secondary antibody, anti-rabbit IgG horse radish peroxidase conjugated, from Agrisera, [AS09 602](#), diluted to 1:35 000 for 1h at room temperature with agitation then washed as above and treated with ECL detection reagent according to the manufacturer's instructions. Exposure time was 5 seconds.

Lane (1) with no signal: recombinant *Triticum* spp. EF1A.

Courtesy Dr. Eman Basha, Arizona State University