# Recombinant Arabidopsis thaliana NADPH-dependent oxidoreductase 2-alkenal reductase (AER)

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| **Product Code** | CSB-EP654400DOA |
| **Relevance** | Catalyzes the reduction of the 7-8 double bond of phenylpropanal substrates, such as p-coumaryl aldehyde and coniferyl aldehyde (in vitro). Has activity towards toxic substrates, such as 4-hydroxy-(2E)-nonenal (in vitro). May play a distinct role in plant antioxidant defense and is possibly involved in NAD(P)/NAD(P)H homeostasis. |
| **Abbreviation** | Recombinant Mouse-ear cress AER protein |
| **Storage** | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C. |
| **Uniprot No.** | Q39172 |
| **Alias** | Short name:DBR1 |
| **Product Type** | Recombinant Protein |
| **Immunogen Species** | Arabidopsis thaliana (Mouse-ear cress) |
| **Purity** | ≥ 90% as determined by SDS-PAGE. |
| **Sequence** | MTATNKQVILKDYVSGFPTESDFDFTTTTVELRVPEGTNSVLVKNLYLSCDPY MRIRMGKPDPSTAALAQAYTPGQPIQGYGVSRIIESGHPDYKKGDLLWGIVAW EEYSVITPMTHAHFKIQHTDVPLSYYTGLLGMPGMTAYAGFYEVCSPKEGETV YVSAASGAVGQLVGQLAKMMGCYVVGSAGSKEKVDLLKTKFGFDDAFNYKE ESDLTAALKRCFPNGIDIYFENVGGKMLDAVLVNMNMHGRIAVCGMISQYNLE NQEGVHNLSNIIYKRIRIQGFVVSDFYDKYSKFLEFVLPHIREGKITYVEDVADG LEKAPEALVGLFHGKNVGKQVVVVARE |
| **Research Area** | Others |
| **Source** | E.coli |
| **Target Names** | AER |
| **Protein Names** | Recommended name: NADP-dependent alkenal double bond reductase P1 Short name= DBR1 EC= 1.3.1.74 |
| **Expression Region** | 1-345aa |
| **Notes** | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week. |
| **Tag Info** | N-terminal 6xHis-SUMO-tagged |
| **Mol. Weight** | 54.1kDa |

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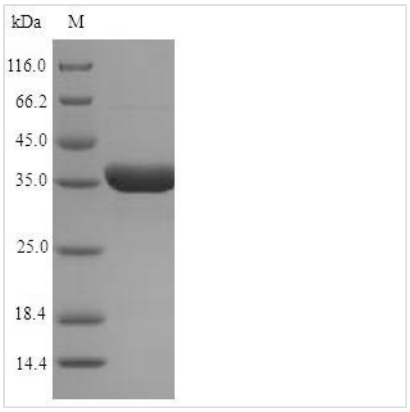
| **Protein Length** | Full Length |

**Image**




(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

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| **Reconstitution** | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference. |
| **Shelf Life** | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.<br>Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C. |