

PRODUCT SPECIFICATION

STATENS
SERUM
INSTITUT



HYB 330-01 Anti MKS1 (MAP Kinase Substrate 1)

Mouse monoclonal antibody

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| Article No. | 60182 | | |
| Product Name | HYB 330-01 Anti MKS1 (MAP Kinase Substrate 1) | | |
| Clone | 34E10 | | |
| Subclass | IgG1 / kappa | | |
| Description | Preparation: | Protein-A purified | |
| | Content: | 1 mg/mL, based on E_{190} =14.0 at A_{280} | |
| | Solvent: | 0.01 M PB, pH 7.4, with 0.5 M NaCl | |
| | Storage: | -18 °C or colder | |
| Antigen | MAP Kinase substrate 1 (MKS1) is a protein from <i>Arabidopsis</i> that is phosphorylated by MAP Kinase 4 (MPK4). MPK4 has been shown to be involved in a MKS1-dependent regulation of plant defences against pathogens (1-3). | | |
| Immunogen | Selected peptide sequence from MKS1. | | |
| Specificity | HYB 330-01 reacts specifically with MKS1 from plants as well as recombinant MKS1 expressed in <i>E. coli</i> . Depending upon extract, other non-specific bands may occasionally be seen. The antibody recognizes MKS1 regardless of the phosphorylation status of MKS1. | | |
| Epitope Specificity | Not determined. | | |
| Reactivity | HYB 330-01 (α -pep22) (2-3) reacts well with MKS1 in immuno-blots of SDS-PAGE separated plant and <i>E. coli</i> extracts. The antibody was screened by ELISA for recognition of recombinant MKS1 and immunoprecipitations from a range of <i>Arabidopsis</i> extracts have been successful. | | |
| Culture Medium | Dulbecco's modified Eagle's medium with 10 % fetal calf serum. | | |
| Fusion Partner | X63-Ag8.653. | | |
| Immunization | Female CF1xBalb/c F1 hybrid mice were immunized i.p. with immunogen conjugated to carrier protein. | | |
| Application | Method | Usability | References |
| | ELISA | yes | |
| | Immunoblotting | yes | 2-3 |
| | Immunofluorescence | nd. | |
| | Immunoprecipitation | yes | 2-3 |
| References | 1) Petersen et al. (2000) Arabidopsis MAP Kinase 4 Negatively Regulates Systemic Acquired Resistance. <i>Cell</i> , 103, 1111-1120. 2) Andreasson et al. (2005) The MAP kinase substrate MKS1 is a regulator of plant defence responses. <i>The EMBO Journal</i> , 24, 2579-2589. 3) Qiu JL, Fiil BK, Petersen K, Nielsen HB, Botanga CJ, Thorgrimsen S, Palma K, Suarez-Rodriguez MC, Sandbech-Clausen S, Lichota J, Brodersen P, Grasser KD, Mattsson O, Glazebrook J, Mundy J, Petersen M. Arabidopsis MAP kinase 4 regulates gene expression through transcription factor release in the nucleus. <i>EMBO J.</i> 2008 Aug 20;27(16):2214-21. | | |
| Conditions | For research use only. Not for use in diagnostic procedures. The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The animals from which this product was derived have not been exposed to or inoculated with any livestock or poultry disease agents exotic to the United States or Western Europe, and did not originate from facilities where work with exotic disease agents affecting livestock or avian species is carried out. | | |

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