

# MRAS Rabbit mAb

Catalog # AP76598

## Product Information

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<b>Application</b>	WB, IP
<b>Primary Accession</b>	<a href="#">O14807</a>
<b>Reactivity</b>	Rat, Human, Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	Monoclonal Antibody
<b>Isotype</b>	IgG
<b>Conjugate</b>	Unconjugated
<b>Purification</b>	Affinity Purified
<b>Calculated MW</b>	23846

## Additional Information

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<b>Gene ID</b>	22808
<b>Other Names</b>	MRAS
<b>Dilution</b>	WB~~1:1000 IP~~N/A
<b>Format</b>	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

## Protein Information

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<b>Name</b>	MRAS
<b>Synonyms</b>	RRAS3
<b>Function</b>	Signal transducer in the Ras-MAPK signaling pathway that regulates cell proliferation and survival (PubMed: <a href="#">16630891</a> , PubMed: <a href="#">28289718</a> , PubMed: <a href="#">35768504</a> , PubMed: <a href="#">35830882</a> , PubMed: <a href="#">35831509</a> , PubMed: <a href="#">36175670</a> ). Core component of the SHOC2-MRAS-PP1c (SMP) holophosphatase complex that regulates the MAPK pathway activation (PubMed: <a href="#">16630891</a> , PubMed: <a href="#">35768504</a> , PubMed: <a href="#">35830882</a> , PubMed: <a href="#">35831509</a> , PubMed: <a href="#">36175670</a> ). The formation of the SMP complex only occurs when MRAS is GTP-bound (PubMed: <a href="#">35768504</a> , PubMed: <a href="#">35830882</a> , PubMed: <a href="#">35831509</a> , PubMed: <a href="#">36175670</a> , PubMed: <a href="#">39809765</a> ). MRAS has low intrinsic GTPase activity and may require additional factors for activation (PubMed: <a href="#">39809765</a> ). The SMP complex specifically dephosphorylates the inhibitory phosphorylation at 'Ser-259' of RAF1 kinase, 'Ser-365' of BRAF kinase and 'Ser-214' of ARAF kinase, stimulating their kinase activities

(PubMed:[16630891](#), PubMed:[35768504](#), PubMed:[35830882](#), PubMed:[35831509](#), PubMed:[36175670](#)).

<b>Cellular Location</b>	Cell membrane; Lipid-anchor; Cytoplasmic side
<b>Tissue Location</b>	Expression highly restricted to the brain and heart

## Background

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May serve as an important signal transducer for a novel upstream stimuli in controlling cell proliferation. Weakly activates the MAP kinase pathway.

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