

# MAS1 (C-13): sc-54846

## BACKGROUND

The proto-oncogene MAS1 is a G protein-coupled receptor located on the plasma membrane. In transfected NIH/3T3 cells, MAS1 has a weak focus-inducing activity. MAS1 is an antagonist of the Angiotensin II type 1 (AT1) receptor, inhibiting the actions of angiotensin II. MAS1 localizes to cardiomyocytes of the heart in mice. Mice deficient for MAS1 demonstrate a lower systolic tension and heart rate. The proper structure and function of the heart may be impaired by nonfunctional MAS1.

## REFERENCES

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3. Kostenis, E., et al. 2005. G protein-coupled receptor MAS is a physiological antagonist of the Angiotensin II type 1 receptor. *Circulation* 111: 1806-1813.
4. Tallant, E.A., et al. 2005. Angiotensin-(1-7) inhibits growth of cardiac myocytes through activation of the MAS receptor. *Am. J. Physiol. Heart Circ. Physiol.* 289: H1560-H1566.
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6. Faria-Silva, R., et al. 2005. Short-term Angiotensin-(1-7) receptor MAS stimulation improves endothelial function in normotensive rats. *Hypertension* 46: 948-952.
7. Santos, R.A., et al. 2006. Impairment of *in vitro* and *in vivo* heart function in Angiotensin-(1-7) receptor MAS knockout mice. *Hypertension* 47: 996-1002.
8. Canals, M., et al. 2006. Upregulation of the Angiotensin II type 1 receptor by the MAS proto-oncogene is due to constitutive activation of G<sub>q</sub>/G<sub>11</sub> by MAS. *J. Biol. Chem.* 281: 16757-16767.
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## CHROMOSOMAL LOCATION

Genetic locus: MAS1 (human) mapping to 6q25.3.

## SOURCE

MAS1 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of MAS1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-54846 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

MAS1 (C-13) is recommended for detection of MAS1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MAS1 siRNA (h): sc-62600, MAS1 shRNA Plasmid (h): sc-62600-SH and MAS1 shRNA (h) Lentiviral Particles: sc-62600-V.

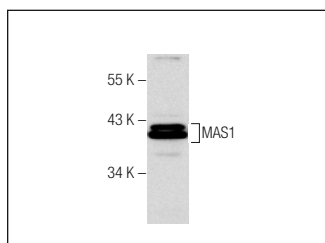
Molecular Weight of MAS1: 37 kDa.

Positive Controls: human liver extract: sc-363766.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



MAS1 (C-13): sc-54846. Western blot analysis of MAS1 expression in human liver tissue extract.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.



Try **MAS1 (G-1): sc-390453**, our highly recommended monoclonal alternative to MAS1 (C-13).