

## Product Information

### Anti-MST1R

produced in rabbit, affinity isolated antibody

Catalog Number **SAB4200551**

#### Product Description

Anti-MST1R is produced in rabbit using as immunogen a synthetic peptide corresponding to an internal region of human MST1R (GenelD: 4486), conjugated to KLH. The corresponding sequence is identical in rat and differs by 2 amino acids in mouse. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-MST1R recognizes human MST1R. The antibody may be used in various immunochemical techniques including immunoblotting (~170 kDa). Detection of the MST1R band by immunoblotting is specifically inhibited by the immunizing peptide.

Macrophage-stimulating protein receptor (MST1R), also known as RON, is a cell surface receptor for macrophage-stimulating protein (MSP) with tyrosine kinase activity. MST1R is closely related to c-Met proto-oncogene and is involved in tumorigenesis. The mature form of this protein is a heterodimer of disulfide-linked  $\alpha$ - and  $\beta$ -subunits, generated by proteolytic cleavage of a single-chain precursor. The  $\beta$ -subunit undergoes tyrosine phosphorylation upon stimulation by MSP providing docking sites for other proteins to bind and activate signaling cascades, including Ras/Raf/MAPK, P13K/Akt and c-Src. MST1R is expressed on the ciliated epithelia of the mucociliary transport apparatus of the lung, and together with MSP, is thought to be involved in host defense. Aberrantly expressed or mutated MST1R was observed in carcinoma of the bladder, breast, colon, lung, ovary, pancreas and prostate. Increased levels of MST1R have also been found in aggressive tumors associated with poor patient survival.<sup>1-3</sup>

#### Reagent

Supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

#### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

#### Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

#### Product Profile

Immunoblotting: a working concentration of 2.5-5.0  $\mu$ g/mL is recommended using whole extracts of human HT-29 cells.

**Note:** In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

#### References

1. Liu, H.S., *Carcinogenesis*, **31**, 1456-1464 (2010).
2. Welm, A.L., et al., *Proc. Natl. Acad. Sci. USA*, **104**, 7570-7575 (2007).
3. Han, W.L., et al., *Chin. Med. J.*, **125**, 1110-1114 (2012).

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