



## Product Information

### Anti-RALT/Mig-6 (SG-16)

Developed in Rabbit  
Affinity Isolated Antibody

Product Number **R 2903**

#### Product Description

Anti-RALT/Mig-6 (SG-16) is developed in rabbit using as immunogen a synthetic peptide corresponding to amino acids 431-446 of rat RALT, conjugated to KLH via an N-terminal added cysteine residue. The antibody is affinity purified on the immunizing peptide immobilized on agarose.

Anti RALT/ Mig-6 (SG-16) recognizes RALT by immunoblotting (approx. 55 kDa). Staining of the RALT band in immunoblotting is specifically inhibited by the RALT immunizing peptide.

RALT (receptor-associated late transducer, also known as gene 33 and Mig-6) belongs to a class of mammalian regulators of tyrosine kinase signaling, whose expression is transcriptionally controlled by receptor activation.<sup>1,2</sup> RALT was isolated as a 459 amino acids protein interacting with the kinase domain of ErbB-2, a receptor tyrosine kinase (RTK) highly associated with development of breast and ovarian carcinomas.<sup>2,3</sup> RALT was previously known as gene 33 from rat; its human counterpart is Mig-6.<sup>4-6</sup> A number of features reveal this protein as a candidate for being a signal transducing protein: proline rich sequences, consensus sequences for phosphorylation by ERK1 and ERK2, a potential binding site for 14-3-3- proteins, and other potential sites for phosphorylation by protein kinase C, A, and Casein Kinase II.<sup>2</sup> Several indications show that RALT is a feedback inhibitor of the ErbB Receptor tyrosine kinase family. Signaling by ErbB-2 induces expression of the RALT protein through activation of the Ras-Raf-Erk pathway. Moreover, physiological levels of RALT suppress ErbB-2 mitogenic signals.<sup>2,4</sup> Transcriptional and translational control by proteasome-dependent degradation provide RALT with the ability to tune ErbB signals.

Mig-6, the human homologue of RALT, was identified as an interacting partner of EGF-receptor. Similar to RALT, its transcription is induced upon EGF stimulation and suppresses transformation induced by EGF receptor overexpression, suggesting a role similar to RALT.<sup>7</sup> Other stimuli, such as osmotic stress and hypoxia, can also lead to induction of Gene 33/RALT.<sup>5,8</sup>

#### Reagent

Anti- RALT/Mig-6 (SG-16) is supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide.

Antibody Concentration: approx. 1.0 mg/ml

#### Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS 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. Storage in frost-free freezers is also not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

#### Product Profile

By immunoblotting, a working antibody concentration of 0.2-0.4 µg/ml is recommended using cell extracts of 293-T cells transfected with rat RALT.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working concentrations by titration.

#### References

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4. Fiorini, M., et al., *Oncogene*, **21**, 6530-6539 (2002).
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6. Wick, M., et al., *Exp. Cell Res.*, **219**, 527-535 (1995).
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8. Saaikoski, A.T., et al., *FEBS Lett.*, **530**, 186-190 (2002).

KAANV 09/04

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