

## Product Information

**Monoclonal Anti-LRIG1, clone LRIG1-21**  
produced in mouse, purified immunoglobulin

Catalog Number **SAB4200445**

### Product Description

Monoclonal Anti-LRIG1 (mouse IgG1 isotype) is derived from the hybridoma LRIG1-21 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a peptide corresponding to a sequence at the N-terminus of human LRIG1 (GeneID: 26018), conjugated to KLH. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2. The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-LRIG1 recognizes human LRIG1. The antibody may be used in various immunochemical techniques including, immunoblotting (~ 143 kDa and 110 kDa), immunocytochemistry and immunohistochemistry. Staining of the LRIG1 bands in immunoblotting is specifically inhibited by the immunizing protein.

LRIG1 is a cell surface transmembrane protein, whose distinctive structural feature is its extracellular domain, which contains a leucine-rich repeat (LRR) domain and three Ig-like modules.<sup>1</sup> It is a 143-kDa protein that may be cleaved into 111-kDa and 32-kDa fragments.<sup>2</sup> Although structurally related to the *Drosophila* Egfr inhibitor Kekkon-1, LRIG1 is not its mammalian orthologue.<sup>3-4</sup> LRIG1 over-expression accelerates basal as well as ligand-induced, epidermal growth factor receptor (EGFR) degradation.<sup>4-6</sup> Ablation of LRIG1 expression in primary human keratinocytes is associated with increased expression of the EGFR at the cell surface.<sup>5</sup> Proteolytic cleavage of ectopically expressed LRIG1 by members of the ADAM (a disintegrin and metalloproteinase) family releases soluble extracellular LRIG1 fragments that are capable of inhibiting EGFR signaling without inducing receptor downregulation.<sup>7</sup> Interestingly, a number of reports suggest that loss of LRIG1 expression occur in human psoriasis lesions and tumors.<sup>8</sup>

### Reagent

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

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 extended storage, freeze at -20 °C in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, 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 2-4 µg/mL is recommended using extracts of LNCaP cells.

Immunofluorescence: a working concentration of 2.5-5.0 µg/mL is recommended using LNCaP cells.

**Note**: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration. The use of sensitive film is recommended.

### References

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3. Ghiglione, C., et al., *Cell*, **96**, 847-856 (1999).
4. Gur, G., et al., *EMBO J.*, **23**, 3270-3281 (2004).
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6. Jensen, K.B. and Watt, F.M., *Proc. Natl. Acad. Sci. USA*, **103**, 11958-11963 (2006).
7. Yi, W., et al., *Exp. Cell Res.*, **317**, 504-512 (2011).
8. Segato, O., et al., *J. Cell Sci.*, **124**, 1785-1793 (2011).

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