

Product Information

Anti-LRIG3 antibody, Mouse monoclonal
clone LRG3-3, purified from hybridoma cell culture

Catalog Number **SAB4200368**

Product Description

Monoclonal Anti-LRIG3 (mouse IgG1 isotype) is derived from the hybridoma LRG3-3 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 human LRIG3 (GeneID: 121227), conjugated to KLH. The corresponding sequence is identical in monkey and share high homology with rat and mouse LRIG3. The isotype is determined using a double diffusion immunoassay 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-LRIG3 recognizes human LRIG3. The antibody may be used in various immunochemical techniques including, immunoblotting (~125kDa; endogenous apparent at ~170kDa due to glycosylation), immunofluorescence and Flow Cytometry (FACS). Staining of the LRIG3 band in immunoblotting is specifically inhibited by the immunizing protein.

The leucine-rich and immunoglobulin-like domains (LRIG) family of proteins consist of three integral membrane proteins; LRIG1, LRIG2 and LRIG3, which share 45-50% amino acid identity.¹ Specifically, LRIG3 mRNA is widely expressed, with the highest levels in the stomach, skin, thyroid and small intestine.¹ It has been implicated in tumorigenesis, psoriasis, neural crest development, and complex tissue morphogenesis.²⁻⁵ Whether these diverse phenotypes reflect a single underlying cellular mechanism is not known. Nevertheless, since LRIG3 contains, like its counterparts, evolutionarily conserved ectodomains harboring both leucine-rich repeats and immunoglobulin domains, it was suggested to have an ability to bind to common partners. Indeed, LRIG3 has been shown to interact with the ErbB family of receptors as well as with Netrin 1.⁵⁻⁶ It should be noted that due to its fundamental role in the onset of many cellular disorders, LRIG3 is a major target for immunotherapies, as well as other novel treatments.

©2021 Sigma-Aldrich Co. LLC. All rights reserved. SIGMA-ALDRICH is a trademark of Sigma-Aldrich Co. LLC, registered in the US and other countries. Sigma brand products are sold through Sigma-Aldrich, Inc. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see product information on the Sigma-Aldrich website at www.sigmaaldrich.com and/or on the reverse side of the invoice or packing slip.

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

For R&D use only. Not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazard and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. 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. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 1.0-2.0 µg/mL is recommended using extracts of H1395 cells.

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

References

1. Guo, D., et al., *Genomics*, **84**, 157-165 (2004).
2. Hedman, H., and Henriksson, R., *Europ. J. Cancer*, **43**, 676-682 (2007).
3. Karlsson, T., et al., *J. Invest. Dermatol.*, **128**, 1192-1195 (2008).
4. Zhao, H., et al., *Development*, **135**, 1283-1293 (2008).
5. Abraira, V.E., et al., *Development*, **135**, 4091-4099 (2008).
6. Abraira, V.E., et al., *PLoS One*, **5**, e8981 (2010).

RC,GG,TD,PHC 02/21-1