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Mig6 Antibody

Store at -20C
#2440

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 51	Source/Isotype: Rabbit	UniProt ID: #Q9UJM3	Entrez-Gene Id: 54206
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Product Usage Information

Application

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Mig6 Antibody detects endogenous levels of total Mig6 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val195 of human Mig6. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Mig6 was identified as a gene which is induced when quiescent fibroblasts are treated by mitogens (1). During cell cycle progression, Mig6 expression levels are also regulated (1). Mig6 mRNA levels were found to increase upon stimulation by chronic stresses including diabetic nephropathy (2). Overexpression of this gene leads to the activation of stress-activated protein kinases (SAPKs)/c-Jun amino-terminal kinases (JNKs) (2). Furthermore, Mig6 was found to interact with epidermal growth factor receptor (EGFR) when stimulated by epidermal growth factor (EGF) (3). Deletion of the Mig6 gene in mice results in hyperactivation of EGFR and signaling through the mitogen-activated protein kinase (MAPK) pathway, causing overproliferation and abnormal differentiation of epidermal keratinocytes in these animals. Inhibition of endogenous EGFR signaling by Iressa abolished skin defects observed in Mig6^{-/-} mice, indicating that Mig6 is a specific negative regulator of EGFR signaling (4). Furthermore, expression of Mig6 was significantly lower in skin, breast, pancreatic and ovarian cancers, suggesting a role of Mig6 as a tumor suppressor (4).

Background References

1. Wick, M. et al. (1995) *Exp. Cell Res.* 219, 527-535.
2. Makkinje, A. et al. (2000) *J. Biol. Chem.* 275, 17838-17847.
3. Hackel, P.O. et al. (2001) *Biol. Chem.* 382, 1649-1662.
4. Ferby, I. et al. (2006) *Nat. Med.* 12, 568-573.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human

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