# 3209 Store at -200

# GDF15/MIC1 (L300) Antibody



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

Applications: WB	Reactivity: H	Sensitivity: Endogenous	<b>MW (kDa):</b> 35, 13	Source: Rabbit	UniProt ID: #Q99988	Entrez-Gene Id 9518	
Product Usage Information	Ap	Application			Dilution		
	Western Blotting			1:1000			
Storage		plied in 10 mM sodi C. Do not aliquot the	VI VI	), 150 mM NaCl, 100 $\mu g/\text{ml}$ BSA and 50% glycerol. Store at –			
		=15/MIC1 (L300) An cessed form.	MIC1 (L300) Antibody detects endogenous levels of total GDF15/MIC1 protein including its active ed form.				
Species predicted to react based on 100% sequence homology:							

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxyl terminus of human GDF15/MIC1. Antibodies are purified by protein A and peptide affinity chromatography.

### **Background**

Macrophage inhibitory cytokine-1 (Mic-1), also termed GDF15 (1), PTGF-β (2), PLAB (3), PDF (4), and NAG-1 (5), is a divergent member of the transforming growth factor-β (TGF-β) superfamily (6). Like other family members, Mic-1 is synthesized as an inactive precursor that undergoes proteolytic processing involving removal of an N-terminal hydrophobic signal sequence followed by cleavage at a conserved RXXR site, generating an active C-terminal domain that is secreted as a dimeric protein. Mic-1 is highly expressed in the placenta and is also dramatically increased by cellular stress, acute injury, inflammation, and cancer. In the brain, Mic-1 is found in the choroid plexus and is secreted into the cerebrospinal fluid (7). It is also a transcriptional target of the p53 tumor suppressor protein and may serve as a biomarker for p53 activity (8,9). During tumor progression, Mic-1 has various effects on apoptosis, differentiation, angiogenesis, and metastasis, and may also contribute to weight loss during cancer (10,11).

## **Background References**

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- 3. Hromas, R. et al. (1997) *Biochim Biophys Acta* 1354, 40-4.
- 4. Paralkar, V.M. et al. (1998) J Biol Chem 273, 13760-7.
- 5. Baek, S.J. et al. (2001) J Biol Chem 276, 33384-92.
- 6. Bootcov, M.R. et al. (1997) Proc Natl Acad Sci USA 94, 11514-9.
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- 8. Kannan, K. et al. (2000) FEBS Lett 470, 77-82.
- 9. Yang, H. et al. (2003) Mol Cancer Ther 2, 1023-9.
- 10. Johnen, H. et al. (2007) Nat Med 13, 1333-40.
- 11. Bauskin, A.R. et al. (2006) Cancer Res 66, 4983-6.

**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

**Cross-Reactivity Key** 

WB: Western Blotting

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H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected

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