

Plac8 (E1J2Z) Rabbit mAb

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Applications: W, IP	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 13	Source/Isotype: Rabbit IgG	UniProt ID: #Q9NZF1	Entrez-Gene Id: 51316
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Product Usage Information**Application**

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Plac8 (E1J2Z) Rabbit mAb recognizes endogenous levels of total Plac8 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro19 of human Plac8 protein.

Background

The placenta-specific gene 8 (*Plac8*) encodes a chromatin-binding protein that was first identified from placenta and that is highly expressed in plasmacytoid dendritic cells (1,2). Research studies indicate that Plac8 plays a role in immune function and is essential in the differentiation of brown fat (3,4). During brown fat differentiation, Plac8 interacts with the transcription factor C/EBPβ at its promoter sequence to activate the transcription of C/EBPβ (4). Experimental deletion of Plac8 in mice leads to impaired innate immune function, abnormal brown fat function, cold intolerance, and obesity (3,4). Additional studies examining the spread of colorectal carcinoma suggest a possible role for Plac8 in cancer invasion, possibly through promoting the epithelial-to-mesenchymal transition seen during tumor progression (5).

Background References

- Galaviz-Hernandez, C. et al. (2003) *Gene* 309, 81-9.
- Rissoan, M.C. et al. (2002) *Blood* 100, 3295-303.
- Ledford, J.G. et al. (2007) *J Immunol* 178, 5132-43.
- Jimenez-Preitner, M. et al. (2011) *Cell Metab* 14, 658-70.
- Li, C. et al. (2014) *J Clin Invest* 124, 2172-87.

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 **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human

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