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Store at -20C  
#9589

## Slug (L40C6) Mouse mAb

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

<b>Applications:</b> W, IP	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 30	<b>Source/Isotype:</b> Mouse IgG2a	<b>UniProt ID:</b> #O43623	<b>Entrez-Gene Id:</b> 6591
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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

Slug (L40C6) Mouse mAb detects endogenous levels of total Slug protein. It does not recognize transfected human or mouse Snail proteins.

### Source / Purification Background

Monoclonal antibody is produced by immunizing animals with a recombinant human Slug protein.

Slug (SNAI2) is a widely expressed transcriptional repressor and member of the Snail family of zinc finger transcription factors (1). Similar to the related Snail protein, Slug binds to the E-cadherin promoter region to repress transcription during development (2). The binding of Slug to integrin promoter sequences represses integrin expression and results in reduced cell adhesion (3). Down regulation of E-cadherin expression occurs during the epithelial-mesenchymal transition during embryonic development, a process also exploited by invasive cancer cells (4,5). The tumor suppressor protein p53 induces Slug expression in γ-irradiated cells; Slug protects damaged cells from apoptosis by repressing p53-induced transcription of the proapoptotic Bcl-2 family protein Puma (6). Deletion mutations in the corresponding Slug gene are associated with the pigmentation disorders Waardenburg Syndrome and Piebaldism, while a genetic duplication resulting in Slug overexpression is associated with a collection of congenital heart defects termed tetralogy of Fallot (7).

### Background References

1. Inukai, T. et al. (1999) *Mol Cell* 4, 343-52.
2. Bolós, V. et al. (2003) *J Cell Sci* 116, 499-511.
3. Turner, F.E. et al. (2006) *J Biol Chem* 281, 21321-31.
4. Barrallo-Gimeno, A. and Nieto, M.A. (2005) *Development* 132, 3151-61.
5. Castro Alves, C. et al. (2007) *J Pathol* 211, 507-15.
6. Wu, W.S. et al. (2005) *Cell* 123, 641-53.
7. Pérez-Mancera, P.A. et al. (2006) *Cytogenet Genome Res* 114, 24-9.

### 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 nonfat dry milk, 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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