

## UK Office

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**Research Use Only. Not for  
diagnostic or therapeutic use.**

## EB05444 - Goat Anti-Melanophilin (mouse) Antibody

Size: 100µg specific antibody in 200µl



### Target Protein

**Principal Names:** 2210418F23Rik, melanophilin, Mlph, In, I1Rk3, Slac-2a, D1Wsu84e, I(1)-3Rk, 5031433I09Rik, leaden, AW228792, OTTMUSP00000025451

**Official Symbol:** Mlph

**Accession Number(s):** NP\_443748.2

**Non-Human GeneID(s):** 171531 (mouse), 316620 (rat)

### Immunogen

Peptide with sequence C-ARHIFAKPVMAQQP, from the C Terminus of the protein sequence according to NP\_443748.2.

Please note the [peptide](#) is available for sale.

### Purification and Storage

Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin.

Aliquot and store at -20°C. Minimize freezing and thawing.

### Applications Tested

**Peptide ELISA:** antibody detection limit dilution 1:32000.

**Western blot:** Approx 80 kDa band observed in Mouse Melanocyte extracts.

Recommended for use at 0.5-2ug/ml. Please note that this product may require overnight incubation of primary and high protein loads. This antibody has been successfully used in WB on Mouse: Sanzà Pet al (PMID: 30898842), Singh RK et al (PMID: 23281710), Figueiredo AC et al (PMID: 18559336), Hume AN et al (PMID: 16914517) and Kunli Zhao et al (PMID: 36803984).

**Immunofluorescence:** Successfully used at 0.5ug/ml to stain mouse melanocytes. This antibody has been successfully used in IF on Mouse: Figueiredo AC et al., J Biol Chem. 2008 Aug 22;283(34):23209-16. PMID:18559336.

**GST-pull down assay:** See publication Figueiredo AC et al., J Biol Chem. 2008 Aug 22;283(34):23209-16. (PMID:18559336).

### Species Reactivity

**Tested:** Mouse

**Expected from sequence similarity:** Mouse, Rat

### Specific References

**This antibody has been successfully used in WB on Mouse:**

Kunli Zhao, Kohichi Matsunaga, Kouichi Mizuno, Hao Wang, Katsuhide Okunishi, Tetsuro Izumi

Functional hierarchy among different Rab27 effectors involved in secretory granule exocytosis.

Elife. 2023 Feb 21;12:e82821.

PMID: 36803984

**This antibody has been successfully used in WB on Mouse:**

Sanzà P, Evans RD, Briggs DA, Cantero M, Montoliu L, Patel S, Sviderskaya EV, Itzen

A, Figueiredo AC, Seabra MC, Hume AN

Nucleotide exchange factor Rab3GEP requires DENN and non-DENN elements for activation and targeting of Rab27a

J Cell Sci. 2019 Mar 21. pii: jcs.212035.

PMID: 30898842

**This antibody has been successfully used in WB on Mouse:**

Singh RK, Mizuno K, Wasmeier C, Wavre-Shapton ST, Recchi C, Catz SD, Futter C, Tolmachova T, Hume AN, Seabra MC.

Distinct and opposing roles for Rab27a/Mlph/MyoVa and Rab27b/Munc13-4 in mast cell secretion.

FEBS J. 2013 Feb;280(3):892-903.

PMID: 23281710

**This antibody has been successfully used in WB, IF and GST pull-down assay:**

Figueiredo AC, Wasmeier C, Tarafder AK, Ramalho JS, Baron RA, Seabra MC.

Rab3GEP Is the Non-redundant Guanine Nucleotide Exchange Factor for Rab27a in Melanocytes.

J Biol Chem. 2008 Aug 22;283(34):23209-16.

PMID: 18559336

**This antibody has been successfully used in WB on Mouse:**

Hume AN, Tarafder AK, Ramalho JS, Sviderskaya EV, Seabra MC.

A coiled-coil domain of melanophilin is essential for Myosin Va recruitment and melanosome transport in melanocytes.

Mol Biol Cell. 2006 Nov;17(11):4720-35.

PMID: 16914517

EB05444 staining (0.5ug/ml) of total melanocyte PNS (200ug per lane) of wild-type and leaden (Mlph null) mice.

The upper band may represent the stacking-separating gel interface. Data kindly provided by A N Hume, Imperial College.

Wild-type C57bl6 derived melanocytes were stained with EB05444 (0.5ug/ml) and detected with Alexa568 conjugated donkey anti-sheep second antibodies. Brightfield image shows melanosome distribution. Data kindly provided by A N Hume, Imperial College.