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# **Product Information**

Contents: Functional Grade Purified anti-mouse Tie-2 (Tek, CD202)

Catalog Number: 16-5987 Sizes: 50 ug, 100 ug, 500 ug

Formulation: Phosphate buffer pH 7.2,

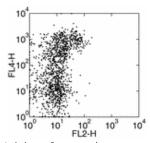
150 mM NaCl, No NaN<sub>3</sub>

Storage Conditions: Store at 4°C. Avoid repeated freeze/thaw cycles.

KEEP CONTENTS STERILE.

Endotoxin Level: Less than 0.001 ng/ug antibody, as determined

by the LAL assay. Clone: TEK4 Isotype: Rat IgG1, ĸ



Two-color surface staining of mouse bone marrow with anti-mouse CD202b (TEK4) PE and Sca-1 (D7) + c-Kit (2B8) APC. Total viable lineage negative cells were used for analysis.

Available Formats of This Product				
Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications
14-5987	Affinity Purified anti-mouse Tie-2 (Tek, CD202)	N/A	N/A	FC
16-5987	Functional Grade* Purified anti-mouse Tie-2 (Tek, CD202)	N/A	N/A	FC
13-5987	Biotin anti-mouse Tie-2 (Tek, CD202)	N/A	N/A	FC
12-5987	PE anti-mouse Tie-2 (Tek, CD202)	488	575	FC
56-5987	Alexa Fluor® 700 anti-mouse Tie-2 (Tek, CD202)	633	723	FC

<sup>\*</sup>Functional Grade™ (FG™) Purified: Azide-free, sterile-filtered, and endotoxin < 0.001 ng/μg (unless otherwise noted).

Purified: Contains azide, not sterile-filtered, and not endotoxin tested.

Questions? Please consult our answers to frequently asked questions at http://www.ebioscience.com/faq.

# Description

The TEK4 monoclonal antibody reacts with mouse Tie-2, also known as CD202. A member of the tyrosine kinase receptor family, Tie-2 is expressed on endothelial and a subset of hematopoietic cells and is believed to play a role in both angiogenesis and hematopoiesis during development of the mouse embryo. In fetal liver and adult bone marrow, Tie-2 is expressed by a subpopulation of hematopoietic progenitor cells characterized as Lineage markers, c-Kit, Sca1, cells. Long-term multilineage repopulating cells were detected in Tie-2<sup>+</sup>, Lineage<sup>-</sup>, c-Kit<sup>+</sup>, Sca1<sup>+</sup> cells but not in Tie-2<sup>-</sup>, Lineage<sup>-</sup>, c-Kit<sup>+</sup>, Sca1<sup>+</sup> cells.

## Usage

For research use only, not for diagnostic or therapeutic use. The TEK4 antibody has been reported for use in flow cytometric analysis.

# **Applications Tested**

The TEK4 antibody has been tested by blocking of staining with fluorochrome conjugated TEK4 on mouse bone marrow cells. This can be used at less than or equal to 1 µg per million cells in a 100 µl total staining volume. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

# **Related Products**

Functional Grade Purified Rat IgG1 Isotype Control Cat 16-4301 Cat. 11-4317 Streptavidin-FITC (Fluorescein isothiocyanate)

Cat. 12-4317 Streptavidin-PE (Phycoerythrin)

<sup>\*</sup>Functional Grade™ (FG™) Biotin: Azide-free, sterile-filtered, and endotoxin < 0.05 ng/µg.

Cat. 17-4317 Streptavidin Allophycocyanin (SA-APC)
Cat. 11-4811 FITC Anti-Rat IgG
Cat. 13-4813 Biotin Anti-Rat IgG (clone Polyclonal)
Cat. 12-5987 PE anti-mouse Tie-2 (Tek, CD202) (clone TEK4)
Cat. 13-5987 Biotin anti-mouse Tie-2 (Tek, CD202) (clone TEK4)
Cat. 14-5987 Affinity Purified anti-mouse Tie-2 (Tek, CD202) (clone TEK4)

#### References

Kolatsi-Joannou M, Li XZ, et al. 2001. Expression and potential role of angiopoietins and Tie-2 in early development of the mouse metanephros. Dev Dyn. 222(1): 120-6. Hsu HC, Ema H, et al. 2000. Hematopoietic stem cells express Tie-2 receptor in the murine fetal liver. Blood. 96(12): 3757-62. Hamaguchi I, Huang XL, et al. 1999. In vitro hematopoietic and endothelial cell development from cells expressing TEK receptor in murine aorta-gonad-mesonephros region. Blood. 93(5): 1549-56. Yano M, Iwama A, et al. 1997. Expression and function of murine receptor tyrosine kinases, TIE and TEK, in hematopoietic stem cells. Blood. 89(12): 4317-26.

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