

**Alexa Fluor® 647 anti-human MERTK**

**Catalog # / Size:** 2438030 / 100 tests  
2438025 / 25 tests

**Clone:** 590H11G1E3

**Isotype:** Mouse IgG1,  $\kappa$

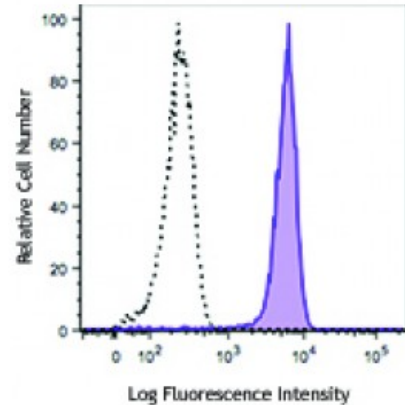
**Immunogen:** MERTK extracellular domain/Fc fusion.

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Concentration:** Lot-specific



Human peripheral blood monocytes were stimulated and cultured with M-CSF for seven days then stained with human MERTK (clone 590H11G1E3) Alexa Fluor® 647 (filled histogram) or mouse IgG1,  $\kappa$  Alexa Fluor® 647 isotype control (open histogram).

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.

**Application References:** 1. Rogers AE, *et al.* 2012. *Oncogene* 31:4171.

**Description:** MERTK plays a role in the retinal pigment epithelium as a regulator of rod outer segments fragments phagocytosis. MERTK also plays a role in the inhibition of Toll-like receptor-mediated innate immune responses through the activation of STAT1. Upregulation of MERTK seems to also promote the survival of certain cancer cells, such as t(1;19)-positive acute lymphoblastic leukemias (ALL). MERTK also has a role in cellular migration, as MERTK KO macrophages demonstrate cytoskeletal disruptions that impacts its shape and directional migration. Melanoma cells express high levels of MERTK, which makes this molecule an attractive therapeutic target.

**Antigen References:** 1. Schlegel J, *et al.* 2013. *J. Clin. Invest.* 123:2257.  
2. Chen J, *et al.* 1997. *Oncogene* 14:2033.  
3. Yefimova MG, *et al.* 2013. *Autophagy* 9:653.  
4. Zhang W, *et al.* 2013. *J.*