

**MULTISCREEN™ STABLE CELL LINE  
HUMAN RECOMBINANT TMEM175 RECEPTOR**

**Data sheet**

**PRODUCT INFORMATION**

**Catalog Number:** C1527

**Lot Number:** C1527-C106-012419

**Quantity:** 1 vial (2 x 10<sup>6</sup>) frozen cells

**Freeze Medium:** Cellbanker 2

**Host cell:** HEK293T

**Transfection:** Expression vector containing full-length human TMEM175 cDNA (GenBank Accession Number NM\_032326.3) with FLAG tag sequence at N-terminus

**Recommended Storage:** Liquid nitrogen upon receiving

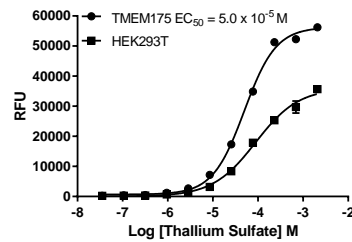
**Propagation Medium:** DMEM, 10% FBS, 1 µg/mL puromycin

**Stability:** In progress

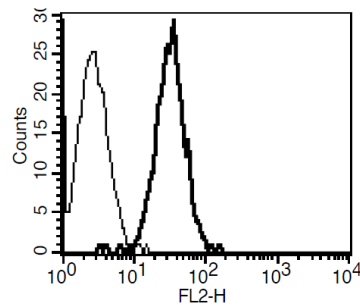
**Background:** Transmembrane Protein 175 (TMEM175) is an organelle-specific potassium channel specifically responsible for potassium conductance in endosomes and lysosomes. TMEM175 is reported to regulate luminal pH stability and is required for autophagosome-lysosome fusion. TMEM175 comprises a K<sup>+</sup> channel that underlies the molecular mechanism of lysosomal K<sup>+</sup> permeability

**Application:** Functional assays

**Figure 1**



**Figure 2**



**Figure 1.** Dose-dependent potassium channel activity upon stimulation of TI<sup>+</sup>, monitored on FLIPR **Figure 2** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

**References:**

Chunlei Cang et al. "TMEM175 Is an Organelle K<sup>(+)</sup> Channel Regulating Lysosomal Function." *Cell* 162: 1101–1112. 27 Aug. 2015.

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