

DESCRIPTION

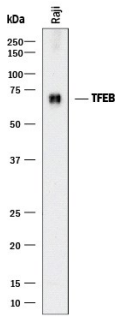
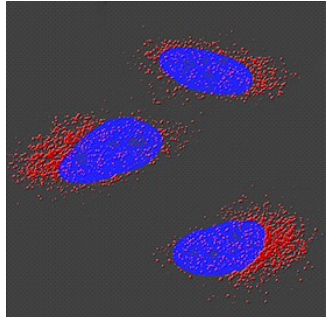
Species Reactivity	Human
Specificity	Detects human TFEB in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 954604
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human TFEB synthetic peptide Pro384-Ala446 Accession # P19484
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below
Immunocytochemistry	3-25 µg/mL	See Below

DATA

<p>Western Blot</p> 	<p>Detection of Human TFEB by Western Blot. Western blot shows lysates of Raji human Burkitt's lymphoma cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human TFEB Monoclonal Antibody (Catalog # MAB9170) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for TFEB at approximately 70 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>TFEB in A549 Human Cell Line. TFEB was detected in immersion fixed A549 human lung carcinoma cell line using Mouse Anti-Human TFEB Monoclonal Antibody (Catalog # MAB9170) at 3 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Transcription Factor EB/TFEB binds E-box (5'-CANNTG-3') where it plays a role in T cell activation through expression of CD40L and CLEAR-box (5'-GTCACGTGAC-3') sequences where it promotes expression of lysosomal genes essential for regulation of autophagy. TFEB is localized to the cytoplasm and translocates to the nucleus under aberrant lysosomal storage conditions. Phosphorylation of S211 in an MTORC1 dependent manner sequesters TFEB in the cytoplasm through association with 14-3-3 family proteins. Inhibition of MTORC1 causes dissociation from this complex and rapid accumulation in the nucleus.