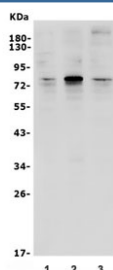


TFEB Antibody (RQ5769)

Catalog No.	Formulation	Size
RQ5769	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P19484
Applications	Western Blot : 0.5-1ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This TFEB antibody is available for research use only.



Western blot testing of human 1) K562, 2) HEK293 and 3) HeLa lysate with TFEB antibody. Expected molecular weight: 53-60 kDa (unmodified), 65-70 kDa (modified).

Description

Transcription factor EB is a protein that in humans is encoded by the TFEB gene. TFEB is a master gene for lysosomal biogenesis. It encodes a transcription factor that coordinates expression of lysosomal hydrolases, membrane proteins and genes involved in autophagy. Upon nutrient depletion and under aberrant lysosomal storage conditions such as in lysosomal storage diseases, TFEB translocates from the cytoplasm to the nucleus, resulting in the activation of its target genes. TFEB overexpression in cultured cells induces lysosomal biogenesis, exocytosis and autophagy. Viral-mediated TFEB overexpression in cellular and mouse models of lysosomal storage disorders and in common neurodegenerative diseases such as Huntington, Parkinson and Alzheimer diseases, resulted in intracellular clearance of accumulating

molecules and rescue of disease phenotypes. TFEB is activated by PGC1- α and promotes reduction of htt aggregation and neurotoxicity in a mouse model of Huntington disease. TFEB overexpression has been found in patients with renal cell carcinoma and pancreatic cancer and was shown to promote tumorigenesis via induction of various oncogenic signals.

Application Notes

Optimal dilution of the TFEB antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids E68-L350) was used as the immunogen for the TFEB antibody.

Storage

After reconstitution, the TFEB antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.