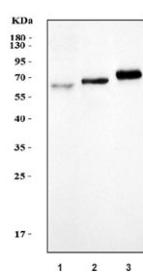


TFEB Antibody / Transcription factor EB (RQ7106)

Catalog No.	Formulation	Size
RQ7106	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P19484
Localization	Cytoplasmic, nuclear
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 1) human Raji, 2) rat lung and 3) mouse lung tissue 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-alpha 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 TFEB protein (amino acids T50-A461) was used as the immunogen for the TFEB antibody.

Storage

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