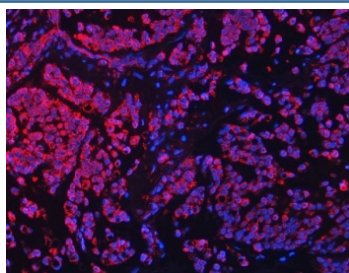


Transcription factor EB Antibody / TFEB (RQ7257)

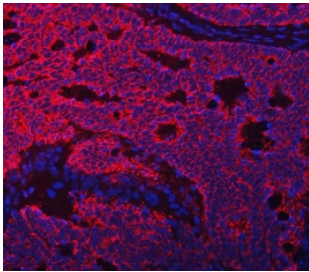
Catalog No.	Formulation	Size
RQ7257	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

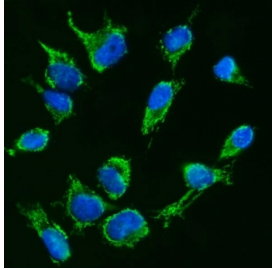
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P19484
Localization	Cytoplasmic, nuclear
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Flow Cytometry : 1-3ug/million cells Immunofluorescence : 5ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This Transcription factor EB antibody is available for research use only.



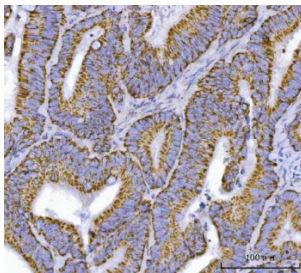
Immunofluorescent staining of FFPE human breast cancer tissue with Transcription factor EB antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



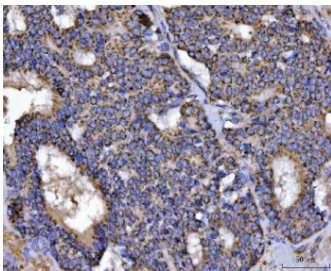
Immunofluorescent staining of FFPE human intestinal cancer tissue with Transcription factor EB antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



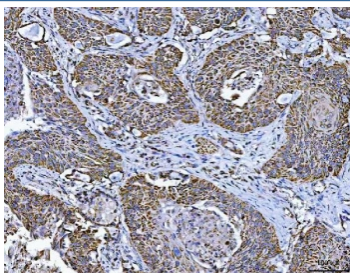
Immunofluorescent staining of FFPE human HeLa cells with Transcription factor EB antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



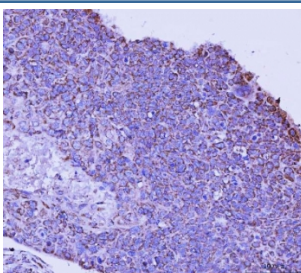
IHC staining of FFPE human colorectal adenocarcinoma tissue with Transcription factor EB antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



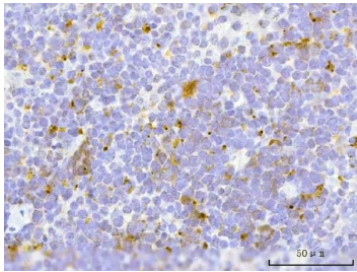
IHC staining of FFPE human breast cancer tissue with Transcription factor EB antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



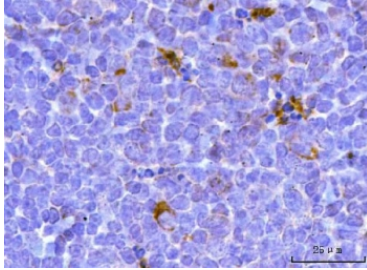
IHC staining of FFPE human lung squamous cell carcinoma tissue with Transcription factor EB antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



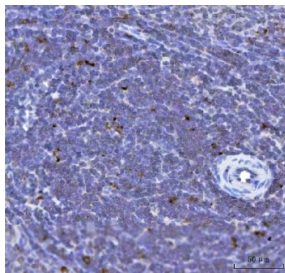
IHC staining of FFPE human esophageal squamous carcinoma tissue with Transcription factor EB antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



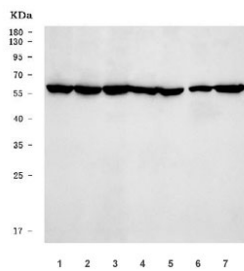
IHC staining of FFPE mouse spleen tissue with Transcription factor EB antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



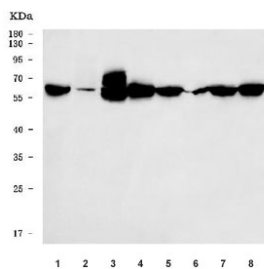
IHC staining of FFPE mouse spleen tissue with Transcription factor EB antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



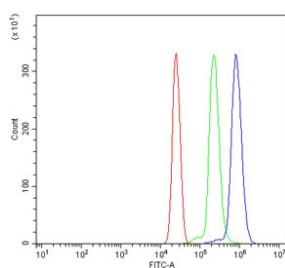
IHC staining of FFPE rat spleen tissue with Transcription factor EB antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of human 1) K562, 2) 293T, 3) HeLa, 4) HepG2, 5) A549, 6) Raji and 7) SW620 cell lysate with TFEB antibody. Expected molecular weight: 53-60 kDa (unmodified), 65-70 kDa (modified).



Western blot testing of 1)rat brain, 2) rat lung, 3) rat PC-12, 4) rat RH35, 5) mouse brain, 6) mouse lung, 7) mouse NIH 3T3 and 8) mouse HEPA1-6 cell lysate with TFEB antibody. Expected molecular weight: 53-60 kDa (unmodified), 65-70 kDa (modified).



Flow cytometry testing of human U937 cells with Transcription factor EB antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue=Transcription factor EB antibody.

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 Transcription factor EB antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids A214-H326) was used as the immunogen for the Transcription factor EB antibody.

Storage

After reconstitution, the Transcription factor EB 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.