

## DATASHEET

# TFE3 Rabbit Monoclonal Antibody(ARB557)

CAT. NO. ARB6849

### KEY FEATURES

Target	TFE3	Clonality	Monoclonal
Clone ID	ARB557	Applications	IHC
Source / Host	Rabbit	Dilution	1:100-1:200
Reactivity	Human	Storage	at-20°C

### BACKGROUND

Transcription factor that acts as a master regulator of lysosomal biogenesis and immune response. Specifically recognizes and binds E-box sequences; efficient DNA-binding requires dimerization with itself or with another MITF/TFE family member such as TFEB, MITF. Involved in the cellular response to amino acid availability by acting downstream of MTOR. Upon the presence of nutrients or TFE3 phosphorylation by MTOR promotes its cytosolic retention and subsequent inactivation. In starvation or lysosomal stress, inhibition of MTOR induces TFE3 dephosphorylation, resulting in nuclear localization and transcription factor activity. In association with TFEB, activates the expression of CD40L in T-cells, thereby playing a role in T-cell-dependent antibody responses in activated CD4<sup>+</sup> T-cells and thymus-dependent humoral immunity. Specifically recognizes the MUE3 box, a subset of E-boxes, present in the immunoglobulin enhancer. It also binds very well to a USF/MLTF site. Acts as a positive regulator of brown adipose tissue by promoting expression of target genes. mTOR-dependent phosphorylation promotes cytoplasmic retention of TFE3 and inhibits brown adipose tissue; maintains the pluripotent state of embryonic stem cells by promoting the expression of genes such as ESRRB; mTOR-dependent nuclear exclusion promotes exit from pluripotency. Required to maintain the naive pluripotent state of hematopoietic stem cell; mTOR-dependent cytoplasmic retention of TFE3 promotes the exit of hematopoietic stem cell from pluripotency.

### APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

IHC	1:100 - 1:200
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\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

### PRODUCT OVERVIEW

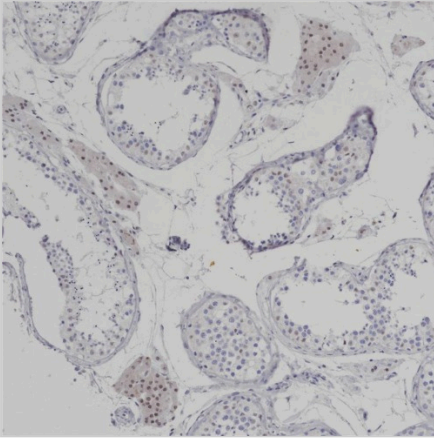
Predicted Molecular Wt	62kDa
Purity	ProA affinity purified IgG
Subcellular location	Nucleus
Swissprot ID	P19532
Immunogen	Synthetic peptide was used as an immunogen.
Storage Buffer	PBS 59%, Sodium azide 0.01%, Glycerol 40%, BSA 0.05%
Recommended method	Heat induced epitope retrieval with Tris-EDTA buffer (pH 9.0), primary antibody incubate at RT (18°C-25°C) for 30 minutes

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET****TFE3 Rabbit Monoclonal Antibody(ARB557)**

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**DATA**

Immunohistochemical staining of human renal cell carcinoma tissue using TFE3 Rabbit Monoclonal Antibody(ARB557)

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.

More information: [www.arexbio.com](http://www.arexbio.com)