

For Research Use Only

# TMEM164 Polyclonal antibody

Catalog Number: 31625-1-AP



## Basic Information

<b>Catalog Number:</b> 31625-1-AP	<b>GenBank Accession Number:</b> BC085605	<b>Purification Method:</b> Antigen affinity Purification
<b>Size:</b> 150ul , Concentration: 350 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 84187	<b>Recommended Dilutions:</b> IHC: 1:50-1:500 IF/ICC: 1:200-1:800
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q5U3C3	
<b>Isotype:</b> IgG	<b>Full Name:</b> transmembrane protein 164	
<b>Immunogen Catalog Number:</b> AG34317		

## Applications

<b>Tested Applications:</b> IHC, IF/ICC, ELISA	<b>Positive Controls:</b> IHC : mouse skeletal muscle tissue, IF/ICC : U2OS cells,
<b>Species Specificity:</b> human, mouse	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

TMEM164 (Transmembrane Protein 164) is a membrane protein with significant roles in various biological processes, including lipid metabolism, neuroprotection, and cancer regulation. In non-small cell lung cancer (NSCLC), TMEM164 promotes ferroptosis by mediating autophagy, leading to the degradation of ferritin, GPX4, and lipid droplets, which facilitates iron accumulation and lipid peroxidation (PMID: 39798196). In neurodegenerative diseases, TMEM164 overexpression via gene therapy shows promise in reducing neurotoxic reactive astrocyte activation and alleviating disease symptoms (PMID: 37679556).

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

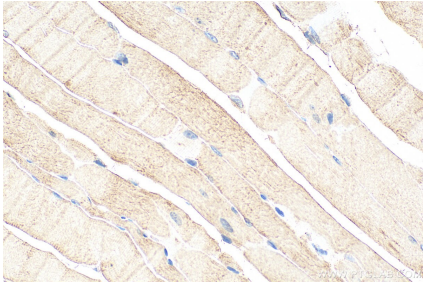
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

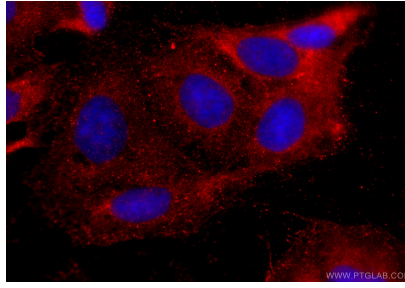
E: proteintech@ptglab.com  
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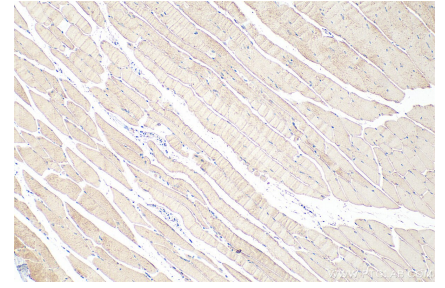
## Selected Validation Data



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 31625-1-AP (TMEM164 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed U2OS cells using TMEM164 antibody (31625-1-AP) at dilution of 1:400 and CoraLite® 594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4).



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 31625-1-AP (TMEM164 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).