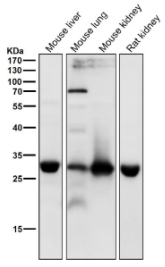
TMEM192 Antibody / Transmembrane protein 192 [clone 30T04] (FY12108)

Catalog No.	Formulation	Size
FY12108	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

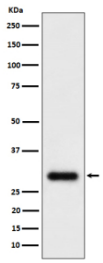
Recombinant RABBIT MONOCLONAL

Bulk quote request

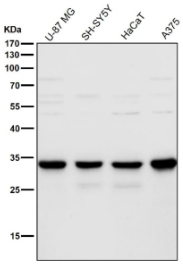
Availability	2-3 weeks
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	30T04
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q8IY95
Applications	Western Blot : 1:500-1:2000 Immunocytochemistry/Immunofluorescence : 1:50-1:200 Flow Cytometry : 1:50
Limitations	This TMEM192 antibody is available for research use only.



All lanes use the antibody at 1:4K dilution for 1 hour at room temperature. Predicted molecular weight ~32 kDa.



Western blot analysis of TMEM192 expression in U87-MG cell lysate. Predicted molecular weight ~32 kDa.



All lanes use the antibody at 1:4K dilution for 1 hour at room temperature. Predicted molecular weight ~32 kDa.

Description

TMEM192 antibody detects transmembrane protein 192, a lysosomal membrane protein involved in vesicular trafficking, autophagy, and lysosome stability. TMEM192 is a multi-pass transmembrane protein localized primarily to lysosomes, where it contributes to maintaining membrane integrity and proper acidification. Its expression is observed in a variety of tissues, reflecting the widespread importance of lysosome function in both nutrient recycling and degradation of damaged cellular components.

Research using TMEM192 antibody has highlighted its importance in lysosome biology. Loss or downregulation of TMEM192 disrupts lysosomal acidification, impairs degradation pathways, and leads to accumulation of autophagic vesicles. These effects are particularly significant in neuronal cells, where lysosomal dysfunction is a hallmark of neurodegenerative conditions such as Alzheimer's disease, Parkinson's disease, and frontotemporal dementia. TMEM192 is also used as a lysosomal marker to investigate spatial distribution of lysosomes and their relationship with autophagosomes during cellular stress.

Beyond neurodegeneration, TMEM192 has relevance in cancer research. Tumor cells rely heavily on lysosomal reprogramming to survive under hypoxia and nutrient deprivation. Altered expression of TMEM192 may contribute to tumor adaptation and proliferation. Understanding how this protein influences lysosomal organization provides insights into both malignant cell survival and potential vulnerabilities in cancer therapy.

Antibodies against TMEM192 are validated for assays including western blot, immunofluorescence, and immunohistochemistry. These reagents enable reliable detection of TMEM192 and allow assessment of lysosome function under both physiological and pathological conditions. Clone-based antibodies ensure high specificity, distinguishing TMEM192 from other lysosomal transmembrane proteins.

NSJ Bioreagents supplies this TMEM192 antibody for research in autophagy, neurodegeneration, and cancer biology.

Application Notes

Optimal dilution of the TMEM192 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human TMEM192 was used as the immunogen for the TMEM192 antibody.

Storage

Store the TMEM192 antibody at -20oC.