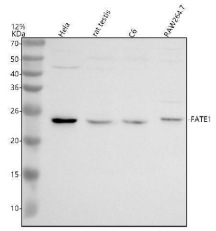
# FATE1 Antibody / Fetal and adult testis expressed 1 Antibody (FY13655)

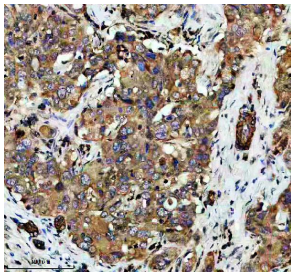
| Catalog No. | Formulation | Size |
|---|---|---|
| FY13655 | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

## Bulk quote request

| | |
|---|---|
| **Species Reactivity** | Human, Mouse, Rat |
| **Format** | Antigen affinity purified |
| **Host** | Rabbit |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit Ig |
| **Buffer** | Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4. |
| **UniProt** | Q969F0 |
| **Applications** | Western blot: 0.5-1ug/ml<br>Immunohistochemistry (FFPE): 2-5ug/ml<br>ELISA: 0.1-0.5 ug/ml |
| **Limitations** | For research use only, this FATE1 Antibody / Fetal and adult testis expressed 1 Antibody is not intended for diagnostic or therapeutic use. |




FATE1 Antibody by WB in 4 lysate samples. Western blot analysis using FATE1 Antibody was performed with 30 ug of protein per lane under reducing conditions on a 12% SDS-PAGE gel. Lane assignments: 1, human HeLa whole-cell lysate; 2, rat testis lysate; 3, rat C6 whole-cell lysate; 4, mouse RAW264.7 whole-cell lysate. Following electrophoresis, proteins were transferred to nitrocellulose and blocked with 5% non-fat milk. The membrane was incubated with rabbit primary antibody at 0.5 ug/ml overnight at 4oC and HRP-conjugated goat anti-rabbit IgG secondary antibody (1:5000). ECL detection showed an immunoreactive band near 24 kDa, as shown in the figure. The higher apparent mass should not be attributed to a specific modification without independent supporting evidence.



FATE1 Antibody by IHC in Human Liver Cancer Tissue. Immunohistochemistry analysis of FATE1 expression in a paraffin-embedded section of human liver cancer tissue using FATE1 Antibody. Brown DAB staining is observed in numerous tumor cells, predominantly within the cytoplasm, with heterogeneous staining intensity across the tissue. Nuclei are counterstained with hematoxylin, and surrounding stromal regions show comparatively limited immunoreactivity. The staining pattern is consistent with cytoplasmic detection of FATE1 in the examined tumor section.

## Description

FATE1 Antibody / Fetal and adult testis expressed 1 Antibody targets a protein with important roles in cellular biology. Fetal and adult testis expressed 1 (FATE1) is a protein originally identified through its restricted expression pattern and subsequently studied as a cancer-testis antigen. Cancer-testis antigens are typically associated with germline tissues but can become aberrantly expressed in certain tumors. This expression pattern has made FATE1 of interest in research on tumor-associated gene regulation and the reactivation of developmental programs in malignant cells.

FATE1 has been linked to the organization of contacts between the endoplasmic reticulum and mitochondria. These organelles communicate through specialized membrane contact sites that help coordinate calcium transfer, lipid metabolism and responses to cellular stress. Experimental studies have suggested that FATE1 can influence the proximity of these membranes, with consequences for mitochondrial calcium handling and sensitivity to apoptosis. Such findings provide a mechanistic connection between organelle architecture and cell survival pathways.

Mitochondrial calcium uptake can stimulate metabolism under physiological conditions but may contribute to cell death when excessive. Alterations in endoplasmic reticulum-mitochondria coupling can therefore change how cells respond to stress signals. In selected tumor models, FATE1 expression has been associated with resistance to apoptosis, although these effects should not be generalized to every cancer type. Its regulation may reflect the broader epigenetic changes that permit expression of normally restricted germline-associated genes.

NSJ Bioreagents offers this FATE1 Antibody to support investigations of FATE1 expression and its proposed role in endoplasmic reticulum-mitochondria communication. Understanding how FATE1 influences organelle contacts may clarify the relationship between altered calcium signaling, apoptotic susceptibility and cancer-associated cellular adaptation.

Explore related research targets in our Cancer Antibodies collection.

## Application Notes

An appropriate dilution of the FATE1 Antibody / Fetal and adult testis expressed 1 Antibody should be determined empirically before routine use.

## Immunogen

The FATE1 Antibody was generated using e. coli-derived human FATE1 recombinant protein (amino acids M1-A167).

## Storage

After reconstitution, keep the FATE1 Antibody at 4oC for up to one month. Alternatively, store aliquots at -20oC for up to six months. Avoid multiple freezing and thawing cycles.

## Alternate Names

FATE1 antibody, Fetal and adult testis-expressed transcript protein antibody, fetal and adult testis expressed 1 antibody, Cancer/testis antigen 43 antibody, CT43 antibody, FATE antibody, Tumor antigen BJ HCC 2 antibody

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