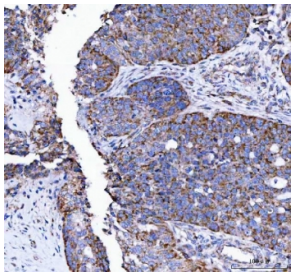
LRRN4 Antibody / Cancer-Associated LRR Protein Antibody (RQ8577)

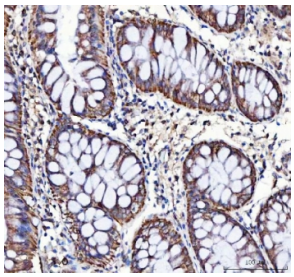
Catalog No.	Formulation	Size
RQ8577	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

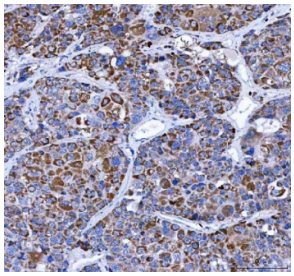
Availability	1-3 days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q8WUT4
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells ELISA: 0.1-0.5ug/ml
Limitations	This LRRN4 Antibody / Cancer-Associated LRR Protein Antibody is available for research use only.



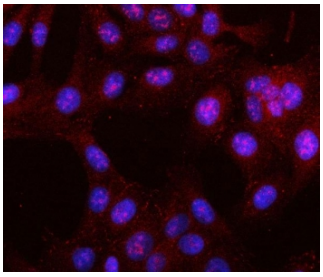
LRRN4 Antibody Ovarian Carcinoma IHC. Immunohistochemistry staining of FFPE human ovarian carcinoma tissue with LRRN4 Antibody / Cancer-Associated LRR Protein Antibody demonstrates diffuse cytoplasmic and membranous HRP-DAB brown staining in malignant epithelial cells, consistent with carcinoma-associated expression of Leucine rich repeat neuronal protein 4 / LRRN4 in ovarian tumor tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



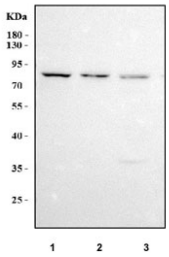
LRRN4 Antibody Colorectal Adenocarcinoma IHC. Immunohistochemistry staining of FFPE human colorectal adenocarcinoma tissue with LRRN4 Antibody / Cancer-Associated LRR Protein Antibody demonstrates predominantly apical and cytoplasmic HRP-DAB brown staining in malignant gland-forming epithelial cells, supporting expression of Leucine rich repeat neuronal protein 4 / LRRN4 in gastrointestinal carcinoma-associated cellular populations. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



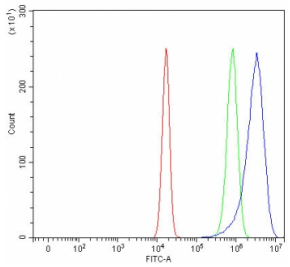
LRRN4 Antibody Liver Cancer IHC. Immunohistochemistry staining of FFPE human liver cancer tissue with LRRN4 Antibody / Cancer-Associated LRR Protein Antibody demonstrates diffuse cytoplasmic HRP-DAB brown staining in malignant hepatic tumor cells with focal membranous accentuation, consistent with carcinoma-associated expression of Leucine rich repeat neuronal protein 4 / LRRN4 in liver malignancy tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



LRRN4 Antibody IF. Immunofluorescent staining of FFPE human U-2 OS cells with LRRN4 Antibody / Cancer-Associated LRR Protein Antibody (red) demonstrates predominantly cytoplasmic fluorescence with punctate perinuclear and occasional nuclear-associated signal, supporting an intracellular localization pattern for Leucine rich repeat neuronal protein 4 / LRRN4 in tumor-derived cells. DAPI nuclear counterstain appears blue. HIER: steam section in pH6 citrate buffer for 20 min.



LRRN4 Antibody WB. Western blot analysis of human Caco-2, U-2 OS, and HepG2 cell lysates using LRRN4 Antibody / Cancer-Associated LRR Protein Antibody demonstrates a major band at approximately 79-85 kDa, consistent with the predicted molecular weight of Leucine rich repeat neuronal protein 4 / LRRN4. Slightly higher apparent migration may reflect glycosylation or other post-translational modifications associated with this leucine-rich repeat-containing protein. Differential signal intensity across the tested cell lines supports variable carcinoma-associated expression of LRRN4 in epithelial and tumor-derived cellular models.



LRRN4 Antibody FACS. Flow cytometry testing of fixed and permeabilized human U-2 OS cells with LRRN4 Antibody / Cancer-Associated LRR Protein Antibody at 1ug/million cells demonstrates a distinct positive fluorescence shift (blue) relative to the isotype control (green) and unstained cells (red), supporting intracellular expression of Leucine rich repeat neuronal protein 4 / LRRN4 in tumor-derived cells. Cells were blocked with goat sera prior to staining.

Description

Leucine rich repeat neuronal protein 4 (LRRN4) is a leucine-rich repeat-containing protein belonging to the LRRN family of signaling-associated proteins involved in cellular communication, differentiation pathways, and tissue-specific regulatory processes. LRRN4 Antibody / Cancer-Associated LRR Protein Antibody recognizes a protein containing characteristic leucine-rich repeat domains that are commonly associated with protein-protein interaction networks and regulatory signaling mechanisms within complex cellular environments.

LRRN4 antibody, also referred to as NLRR4 antibody and Leucine rich repeat neuronal protein 4 antibody in the literature, is useful for investigating tumor-associated expression patterns, cellular differentiation states, and cancer-

related signaling biology. Although originally classified within a neuronal leucine-rich repeat protein family based on sequence homology, available immunohistochemistry and cell-based staining data support broader expression relevance in epithelial and tumor-associated cellular contexts.

LRRN4 demonstrates predominantly cytoplasmic staining patterns in multiple carcinoma tissue types, including ovarian carcinoma, colorectal adenocarcinoma, and liver cancer samples. In cultured U-2 OS cells, immunofluorescence staining demonstrates cytoplasmic signal with punctate nuclear localization, supporting a potentially dynamic intracellular distribution pattern rather than a strictly membrane-restricted localization profile. These findings suggest that LRRN4 may participate in intracellular regulatory pathways associated with tumor cell signaling, differentiation status, or cellular stress-response mechanisms.

Leucine-rich repeat-containing proteins frequently function as signaling adaptors, scaffold-associated proteins, or regulatory mediators capable of coordinating cellular interaction networks and pathway-specific responses. Members of this broader protein family have been implicated in developmental signaling, tissue organization, migration biology, and oncogenic progression. Increasing evidence suggests that several LRR-containing proteins contribute to tumor-associated signaling environments by influencing proliferation pathways, cellular plasticity, or microenvironmental interactions.

In cancer biology, proteins displaying cytoplasmic and punctate nuclear localization patterns are often associated with dynamic regulatory activity involving intracellular trafficking, transcription-associated signaling, stress adaptation pathways, or differentiation-dependent expression changes. The observed staining profile for LRRN4 across carcinoma tissues and cultured tumor-derived cells supports continued investigation into its biologic role in epithelial malignancies and tumor-associated regulatory processes.

LRRN4 may also have utility as a research marker for studying tumor heterogeneity, lineage-associated expression patterns, and intracellular signaling biology in carcinoma models. Because leucine-rich repeat proteins commonly participate in coordinated signaling networks, antibodies targeting these proteins can provide useful tools for characterizing cellular organization and pathway-associated expression states within cancer research applications.

NSJ Bioreagents offers LRRN4 antibodies suitable for investigating carcinoma-associated expression, intracellular signaling biology, differentiation-associated pathways, and leucine-rich repeat protein function across a variety of immunohistochemistry, immunofluorescence, and flow cytometry research applications.

Explore additional Cancer Antibodies targeting tumor-associated signaling proteins, intracellular regulatory markers, and carcinoma-associated expression pathways.

Application Notes

Optimal dilution of the LRRN4 Antibody / Cancer-Associated LRR Protein Antibody should be determined by the researcher.

Immunogen

An E.coli-derived human recombinant protein (amino acids H125-R656) was used as the immunogen for the LRRN4 antibody.

Storage

After reconstitution, the LRRN4 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

LRRN4 antibody, NLRR4 antibody, leucine rich repeat neuronal protein 4 antibody, cancer-associated LRR protein antibody, LRRN4 carcinoma antibody

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