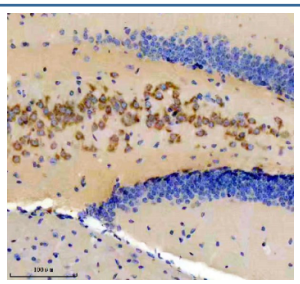
DKK3 Antibody / Dickkopf-related protein 3 [clone 21D17] (FY13434)

Catalog No.	Formulation	Size
FY13434	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

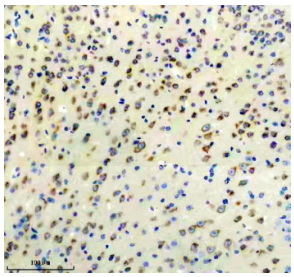
Recombinant RABBIT MONOCLONAL

Bulk quote request

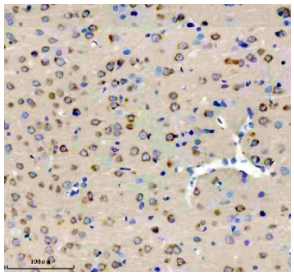
Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	21D17
Purity	Purified
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q9UBP4
Localization	Cytoplasm
Applications	Western blot: 1:500-1:2000 Immunohistochemistry: 1:50-1:200
Limitations	This DKK3 antibody is available for research use only.



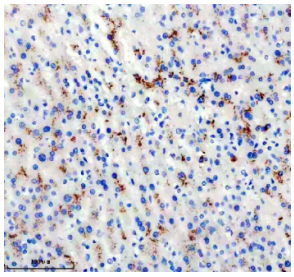
Immunohistochemical staining using DKK3 antibody on paraffin-embedded mouse brain tissue sections. Heat-induced epitope retrieval was performed using EDTA buffer (pH 8.0) prior to antibody incubation. Sections were blocked with 10% goat serum and incubated with DKK3 antibody overnight at 4C. Detection was carried out using an HRP-based secondary antibody with DAB as the chromogen. Staining demonstrates cytoplasmic immunoreactivity in brain tissue. Nuclei were counterstained with hematoxylin.



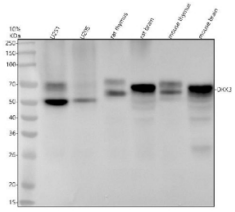
Immunohistochemical staining using DKK3 antibody on paraffin-embedded mouse brain tissue sections. Heat-induced epitope retrieval was performed using EDTA buffer (pH 8.0) prior to antibody incubation. Sections were blocked with 10% goat serum and incubated with DKK3 antibody overnight at 4C. Detection was carried out using an HRP-based secondary antibody with DAB as the chromogen. Staining demonstrates cytoplasmic immunoreactivity in brain tissue. Nuclei were counterstained with hematoxylin.



Immunohistochemical staining using DKK3 antibody on paraffin-embedded rat brain tissue sections. Heat-induced epitope retrieval was performed using EDTA buffer (pH 8.0) prior to antibody incubation. Sections were blocked with 10% goat serum and incubated with DKK3 antibody overnight at 4C. Detection was carried out using an HRP-based secondary antibody with DAB as the chromogen. Staining demonstrates cytoplasmic immunoreactivity in brain tissue. Nuclei were counterstained with hematoxylin.



Immunohistochemical staining using DKK3 antibody on paraffin-embedded human liver cancer tissue sections. Heat-induced epitope retrieval was performed using EDTA buffer (pH 8.0) prior to antibody incubation. Sections were blocked with 10% goat serum and incubated with DKK3 antibody overnight at 4C. Detection was carried out using an HRP-based secondary antibody with DAB as the chromogen. Staining shows cytoplasmic immunoreactivity in tumor cells. Nuclei were counterstained with hematoxylin.



Western blot analysis using DKK3 antibody. Lane 1: human U251 whole cell lysate; Lane 2: human U2OS whole cell lysate; Lane 3: rat thymus tissue lysate; Lane 4: rat brain tissue lysate; Lane 5: mouse thymus tissue lysate; Lane 6: mouse brain tissue lysate. The predicted molecular weight of DKK3 is ~38 kDa, while DKK3 antibody detects bands migrating between approximately 50 and 70 kDa on SDS-PAGE, consistent with post-translationally modified and mature forms of Dickkopf-related protein 3.

Description

DKK3 antibody targets Dickkopf-related protein 3, encoded by the DKK3 gene. DKK3 is a secreted glycoprotein belonging to the Dickkopf family, a group of proteins originally identified as modulators of Wnt signaling. Unlike other Dickkopf family members, DKK3 does not function as a classical Wnt antagonist and instead exhibits context-dependent regulatory roles in cell signaling, differentiation, and tissue homeostasis. DKK3 is synthesized intracellularly and secreted into the extracellular space, where it can influence cell-cell communication.

Functionally, Dickkopf-related protein 3 has been implicated in regulation of cell proliferation, apoptosis, and differentiation. DKK3 activity appears to depend on cellular context and tissue type, with reported involvement in modulation of growth factor signaling pathways and stress-responsive cellular programs. Through these mechanisms, DKK3 contributes to maintenance of normal tissue architecture and regulation of cellular responses to environmental cues. A DKK3 antibody supports studies focused on extracellular signaling and regulatory protein function.

DKK3 expression is detected in a variety of tissues, including epithelial and stromal compartments. It is often associated with differentiated cell states and has been reported to localize both intracellularly during synthesis and extracellularly following secretion. Changes in DKK3 expression levels have been linked to alterations in cellular differentiation status and signaling balance.

From a disease-relevance perspective, DKK3 has been widely studied in cancer biology. Reduced or altered DKK3 expression has been reported in multiple tumor types and is frequently associated with tumor progression, invasion, and poor prognosis. DKK3 has therefore been proposed as a tumor suppressor-associated protein and a potential biomarker for disease state and therapeutic response. These associations make DKK3 an important target for research into cancer-related signaling pathways.

At the molecular level, Dickkopf-related protein 3 contains conserved cysteine-rich domains characteristic of the Dickkopf family, which support protein folding and extracellular interactions. Post-translational modifications and secretion dynamics can influence its apparent behavior in biochemical assays. DKK3 antibody reagents support research applications focused on cell signaling, tumor biology, and extracellular regulatory mechanisms, with NSJ Bioreagents providing reagents intended for research use.

Application Notes

Optimal dilution of the DKK3 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human Dickkopf-related protein 3 was used as the immunogen for the DKK3 antibody.

Storage

After reconstitution, the DKK3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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