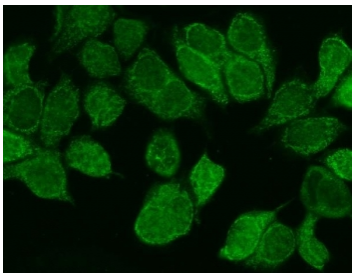
WNT8B Antibody / Developmental Signaling Ligand (RQ6818)

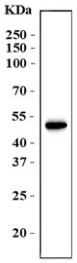
Catalog No.	Formulation	Size
RQ6818	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business 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	Q93098
Applications	Western blot: 1-2ug/ml Immunofluorescence (FFPE): 5ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This WNT8B Antibody / Developmental Signaling Ligand is available for research use only.



WNT8B Antibody MCF7 IF. Immunofluorescent staining of FFPE human MCF7 cells using WNT8B antibody demonstrates prominent cytoplasmic and membranous green fluorescence, consistent with expression of WNT8B, a secreted Wnt family signaling ligand involved in developmental and cellular communication pathways. WNT8B functions upstream of Wnt signaling cascades that regulate cell fate determination, differentiation, tissue patterning, and signal transduction. The observed staining pattern is consistent with the synthesis and secretion of Wnt ligands and supports the utility of WNT8B antibody for studies of developmental signaling, cellular communication, and Wnt pathway biology. HIER: steam section in pH6 citrate buffer for 20 min.



WNT8B Antibody RT4 WB. Western blot analysis of human RT4 cell lysate using WNT8B antibody demonstrates a distinct immunoreactive band at approximately 39 kDa, consistent with the predicted molecular weight of WNT8B. WNT8B is a secreted Wnt family signaling ligand that functions within developmental and tissue regulatory pathways controlling cell fate determination, differentiation, and cellular communication. As an upstream activator of Wnt signaling cascades, WNT8B contributes to the regulation of gene expression programs involved in embryogenesis, tissue patterning, and maintenance of cellular identity. The observed band supports expression of WNT8B in RT4 cells and demonstrates the utility of this antibody for western blot analysis of Wnt pathway-associated proteins. Predicted molecular weight: ~39 kDa.

Description

WNT8B Antibody / Developmental Signaling Ligand is designed for the detection and study of WNT8B, a secreted signaling glycoprotein that functions as a component of the highly conserved Wnt signaling pathway. WNT8B belongs to the Wnt family of extracellular ligands that regulate communication between neighboring cells and coordinate developmental processes throughout vertebrate biology. By activating downstream signaling cascades that influence gene expression and cellular behavior, WNT8B contributes to regulation of tissue patterning, cell fate specification, differentiation, and maintenance of developmental programs. As a result, WNT8B has become an important target for researchers investigating developmental signaling and cellular communication networks.

WNT8B is a member of a larger family of Wnt proteins that function as secreted morphogens capable of influencing cellular responses in a concentration-dependent manner. Wnt ligands bind cell-surface receptors and co-receptors to initiate signaling events that ultimately regulate transcriptional programs controlling growth, differentiation, migration, polarity, and tissue organization. These pathways are among the most extensively studied signaling systems in developmental biology because they govern fundamental decisions that determine how cells acquire specialized identities and contribute to tissue formation.

One of the principal functions of WNT8B is participation in developmental signaling networks that guide embryogenesis and organ formation. Wnt pathway activity influences establishment of developmental gradients, regulation of progenitor cell populations, and coordination of morphogenetic processes required for normal vertebrate development. Through these activities, WNT8B contributes to the molecular mechanisms that enable tissues and organ systems to develop in a highly organized and reproducible manner. Because many of these pathways are conserved across species, WNT8B continues to serve as an important model for understanding developmental regulation in vertebrate organisms.

Beyond embryonic development, WNT8B-associated signaling remains important in adult tissues. Wnt pathway components participate in maintenance of tissue homeostasis, regulation of stem and progenitor cell populations, and coordination of cellular renewal processes. The ability of Wnt ligands to influence differentiation and cellular identity has generated substantial interest in regenerative medicine and stem cell biology, where investigators seek to better understand the molecular pathways that govern tissue repair and regeneration. WNT8B therefore remains relevant not only to developmental biology but also to studies examining maintenance and restoration of tissue function throughout life.

Cancer biology represents another major area of Wnt pathway research. Alterations in Wnt signaling networks can influence cellular proliferation, differentiation status, tissue architecture, and interactions within the cellular microenvironment. Consequently, WNT family proteins have been widely investigated in studies examining developmental pathway dysregulation and aberrant cellular signaling. Although WNT8B is primarily recognized for its developmental functions, its participation in broader Wnt signaling networks has made it an important target in research involving signal transduction, cellular plasticity, and tissue organization.

WNT8B also contributes to the growing understanding of how extracellular signaling molecules coordinate complex biologic responses across multiple cell types. Because Wnt ligands function upstream of diverse transcriptional and

regulatory pathways, they provide valuable insight into mechanisms that control cellular communication and developmental decision-making. Investigations involving WNT8B continue to advance knowledge of how signaling gradients, receptor activation, and downstream gene regulation interact to shape tissue development and physiologic function.

WNT8B Antibody is useful for investigating Wnt signaling, developmental biology, embryogenesis, tissue patterning, cell fate determination, stem cell regulation, regenerative biology, and signal transduction. Researchers utilize WNT8B Antibody reagents to evaluate protein expression patterns and study molecular mechanisms governing cellular communication, developmental signaling pathways, tissue organization, and Wnt pathway-dependent regulatory networks.

Explore additional antibodies to Wnt signaling proteins, developmental signaling ligands, and intracellular pathway regulators on our Signal Transduction Antibodies page.

Application Notes

Optimal dilution of the WNT8B Antibody / Developmental Signaling Ligand should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids A206-R340) was used as the immunogen for the WNT8B antibody.

Storage

After reconstitution, the WNT8B 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

WNT8B Antibody, WNT8 Antibody, Wingless-Type MMTV Integration Site Family Member 8B Antibody, Developmental Signaling Ligand Antibody, Wnt Signaling Protein Antibody, Secreted Morphogen Antibody, Cell Fate Determination Protein Antibody

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