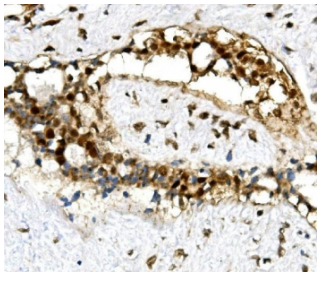
U2AF65 Antibody / U2AF2 (RQ5680)

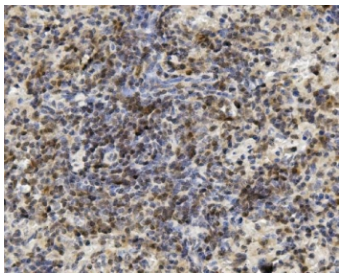
Catalog No.	Formulation	Size
RQ5680	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

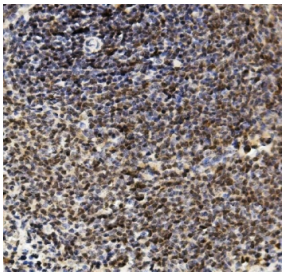
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P26368
Localization	Nuclear
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry: 1-2ug/ml Immunofluorescence: 2-4ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml Immunoprecipitation: 2ug per 500ug of lysate
Limitations	This U2AF65 antibody is available for research use only.



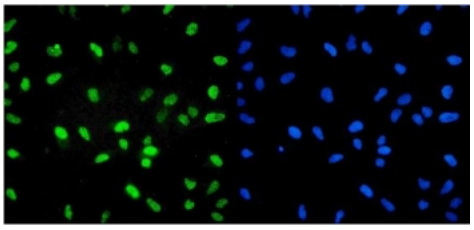
IHC staining of FFPE human breast cancer with U2AF65 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



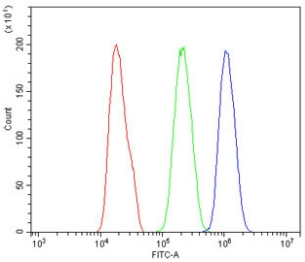
IHC staining of FFPE mouse spleen with U2AF65 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



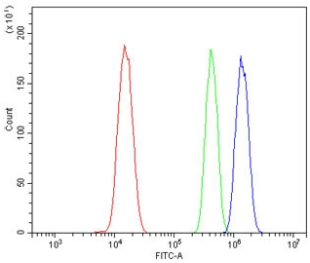
IHC staining of FFPE rat spleen with U2AF65 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



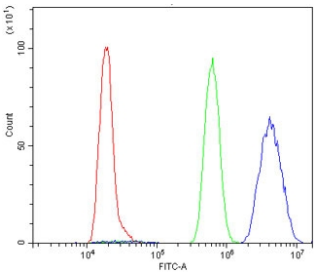
Immunofluorescent staining of FFPE human HeLa cells with U2AF65 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



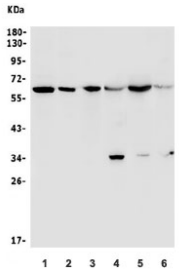
Flow cytometry testing of human PC-3 cells with U2AF65 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= U2AF65 antibody.



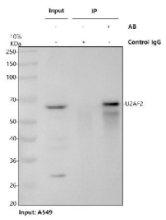
Flow cytometry testing of mouse ANA-1 cells with U2AF65 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= U2AF65 antibody.



Flow cytometry testing of rat NRK cells with U2AF65 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= U2AF65 antibody.



Western blot testing of 1) human HEK293, 2) human ThP-1, 3) human U-2 OS, 4) rat brain, 5) rat spleen and 6) mouse brain lysate with U2AF65 lysate. Expected molecular weight ~65 kDa.



Immunoprecipitation of U2AF65 protein from 500ug of human A549 whole cell lysate with 2ug of U2AF65 antibody.

Description

U2AF65 antibody targets U2 small nuclear RNA auxiliary factor 2, encoded by the U2AF2 gene. U2AF65 is a nuclear RNA-binding protein that functions as a core component of the pre-mRNA splicing machinery. It plays a critical role in early spliceosome assembly by recognizing and binding the polypyrimidine tract at the 3-prime splice site of introns. Through this activity, U2AF65 facilitates recruitment of additional splicing factors and ensures accurate intron removal during gene expression.

Functionally, U2AF65 works as a heterodimer with U2AF35, forming the U2AF complex that defines splice site selection and exon-intron boundaries. By stabilizing interactions between pre-mRNA and the U2 small nuclear ribonucleoprotein, U2AF65 supports precise and efficient spliceosome assembly. This process is essential for generating correctly spliced mRNA transcripts and maintaining proteome diversity. A U2AF65 antibody supports studies focused on RNA splicing regulation and post-transcriptional gene control.

U2AF2 is broadly expressed in eukaryotic cells, reflecting the universal requirement for accurate pre-mRNA splicing. Expression is particularly relevant in highly transcriptionally active cells, where dynamic regulation of alternative splicing is required to adapt gene expression programs. U2AF65 interacts with numerous splicing regulators and RNA-binding proteins, positioning it as a central hub in the control of constitutive and alternative splicing events.

From a disease-relevance perspective, dysregulation of U2AF65-mediated splicing has been implicated in cancer and genetic disease. Altered expression or mutation of splicing factors can lead to aberrant exon usage and production of dysfunctional protein isoforms. U2AF2 has been studied in the context of tumorigenesis, where changes in splicing patterns contribute to altered cell growth, survival, and differentiation. These associations make U2AF65 an important target for investigating splicing-related mechanisms of disease.

At the molecular level, U2AF65 contains RNA recognition motifs that enable specific binding to uridine-rich sequences within pre-mRNA. Post-translational modifications and interactions with partner proteins can modulate its splicing activity and influence its behavior in biochemical assays without implying changes in primary sequence. A U2AF65 antibody supports research applications focused on spliceosome function, RNA processing, and disease-associated alterations in mRNA splicing, with NSJ Bioreagents providing reagents intended for research use.

Application Notes

Optimal dilution of the U2AF65 antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids M238-H470) was used as the immunogen for the U2AF65 antibody.

Storage

After reconstitution, the U2AF65 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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