

# WDR55 Antibody / WD repeat-containing protein 55 (FY13159)

Catalog No.	Formulation	Size
FY13159	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

#### **Bulk quote request**

Availability	1-2 days
Species Reactivity	Human, Mouse
Format	Lyophilized
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q9H6Y2
Applications	Western Blot : 0.25-0.5ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This WDR55 antibody is available for research use only.

## **Description**

WDR55 antibody detects WD repeat-containing protein 55, a nucleolar protein essential for ribosome biogenesis and cell proliferation. The UniProt recommended name is WD repeat-containing protein 55 (WDR55). This protein participates in the maturation of 18S ribosomal RNA and assembly of the small ribosomal subunit, contributing to efficient protein synthesis and cell growth.

Functionally, WDR55 antibody identifies a 365-amino-acid protein that localizes to the nucleolus, where it interacts with components of the small subunit (SSU) processome. WDR55's WD-repeat domains form beta-propeller structures that scaffold RNA processing enzymes and ribonucleoprotein complexes necessary for pre-rRNA cleavage and modification.

The WDR55 gene is located on chromosome 2q23.3 and is expressed in actively dividing tissues, including testis, thymus, and embryonic stem cells. By regulating ribosome biogenesis, WDR55 supports developmental processes requiring high translational output and cell proliferation.

Pathologically, loss of WDR55 function disrupts rRNA processing and nucleolar organization, leading to developmental delay, craniofacial abnormalities, and immunodeficiency (as seen in North American Indian childhood cirrhosis-like syndromes). Research using WDR55 antibody supports studies in ribosome assembly, RNA biology, and developmental

genetics.

WDR55 antibody is validated for western blotting, immunofluorescence, and immunohistochemistry to detect nucleolar proteins and ribosome assembly factors. NSJ Bioreagents provides WDR55 antibody reagents optimized for studies in RNA metabolism, cell cycle regulation, and nucleolar dynamics.

Structurally, WD repeat-containing protein 55 contains multiple WD repeats forming a propeller-like fold that mediates stable RNA-protein interactions. This antibody enables investigation of WDR55's role in ribosome biogenesis and nucleolar organization.

## **Application Notes**

Optimal dilution of the WDR55 antibody should be determined by the researcher.

#### **Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human WDR55 was used as the immunogen for the WDR55 antibody.

#### **Storage**

After reconstitution, the WDR55 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.