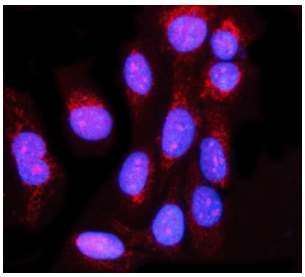
MIS12 Antibody (RQ8348)

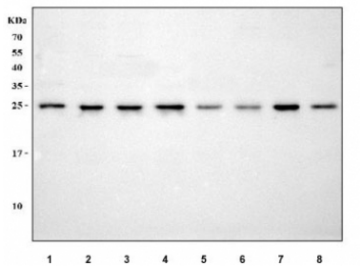
Catalog No.	Formulation	Size
RQ8348	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

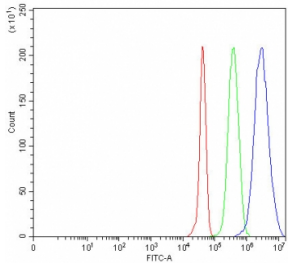
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q9H081
Applications	Western blot: 0.5-1ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells ELISA: 0.1-0.5ug/ml
Limitations	This MIS12 antibody is available for research use only.



Immunofluorescent staining of FFPE human U-2 OS cells with MIS12 antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) HeLa, 2) 293T, 3) HepG2, 4) Jurkat, 5) HaCaT, 6) U-251, 7) SH-SY5Y and 8) K562 cell lysate with MIS12 antibody. Predicted molecular weight ~24 kDa.



Flow cytometry testing of fixed and permeabilized human JK cells with MIS12 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= MIS12 antibody.

Description

Protein MIS12 homolog is a protein that in humans is encoded by the MIS12 gene. Mis12 complex is composed of four subunits, Protein MIS12 homolog, Polyamine-modulated factor 1, Kinetochore-associated protein DSN1 homolog, and Kinetochore-associated protein NSL1 homolog (UniProt: Q9H081, Q6P1K2, Q9H410, Q96IY1, respectively) that are encoded by genes known as MIS12 (Gene ID: 79003), PMF1 (Gene ID: 100527963), DSN1 (Gene ID: 79980), and NSL1 (also known as C1orf48, DC31, DC8, MIS14) (Gene ID: 25936) in human. The MIS12 complex is a protein interaction hub for outer kinetochore assembly. This complex acts as the primary microtubule-binding interface at kinetochores and provides a platform to recruit regulatory proteins. In human Mis12 complex subunits are shown to localize with centromere protein A (CENP-A) at inner kinetochores and internally to Ndc80 at outer kinetochores. Mis12 complex plays an essential role in chromosome segregation in vertebrates and contributes to mitotic kinetochore assembly. Reduced levels of Mis12 complex proteins are shown to result in chromosome alignment defects in both human and chicken cells, but spindle bipolarity is not disturbed.

Application Notes

Optimal dilution of the MIS12 antibody should be determined by the researcher.

Immunogen

An E.coli-derived human recombinant protein (M1-K187) was used as the immunogen for the MIS12 antibody.

Storage

After reconstitution, the MIS12 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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