For Research Use Only

## RNF20 Recombinant monoclonal antibody, PBS Only

Catalog Number:85630-6-PBS



**Basic Information** 

Catalog Number: 85630-6-PBS

BC110585 GeneID (NCBI): Source: Rabbit 56254 **UNIPROT ID:** Isotype: Q5VTR2 Full Name:

Immunogen Catalog Number:

AG16066

ring finger protein 20 Calculated MW:

GenBank Accession Number:

975 aa, 114 kDa Observed MW: 114 kDa

**Purification Method:** Protein A purification

CloneNo.: 243078G12

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, Indirect ELISA

Species Specificity: human, mouse

## **Background Information**

RNF20, also named as E3 ubiquitin-protein ligase BRE1A, is a 975 amino acid protein, which contains 1 RING-type zinc finger and belongs to the BRE1 family. RNF20 is a component of the RNF20/40 complex and localizes in the nucleus. RNF20 is a component of the RNF20/40 E3 ubiquitin-protein ligase complex that mediates monoubiquitination of 'Lys-120' of histone H2B (H2BK120ub1). H2BK120ub1 gives a specific tag for epigenetic transcriptional activation and is also prerequisite for histone H3 'Lys-4' and 'Lys-79' methylation (H3K4me and H3K79me, respectively). The RNF20/40 complex forms a H2B ubiquitin ligase complex in cooperation with the E2 enzyme UBE2A or UBE2B. RNF20 is required for transcriptional activation of Hox genes and recruited to the MDM2 promoter, probably by being recruited by p53/TP53, and thereby acts as a transcriptional coactivator. RNF20/40  $complex\ monoubiquitinates\ and\ stabilizes\ Eg5.\ Loss\ of\ RNF20/40\ results\ in\ spindle\ assembly\ defects,\ cell\ cycle$ arrest and apoptosis. Spindle assembly role of the RNF20/40 complex, and implicates the RNF20/40-Eg5 axis in breast carcinogenesis, supporting the pursuit of these proteins as potential targets for breast cancer therapeutic interventions.

Storage

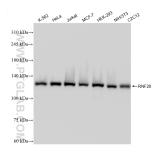
Storage:

Store at -80°C.

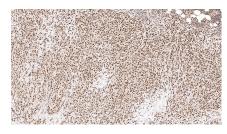
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C Storage Buffer:

PBS only, pH7.3

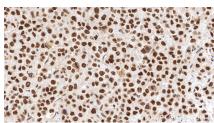
## **Selected Validation Data**



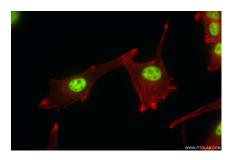
Various lysates were subjected to SDS PAGE followed by western blot with 85630-6-RR (RNF20 antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85630-6-PBS in a different storage buffer formulation.



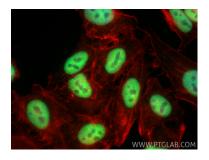
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 85630-6-RR (RNF20 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 85630-6-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 85630-6-RR (RNF 20 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 85630-6-PBS in a different storage buffer formulation



Immunofluorescent analysis of (4% PFA) fixed U-87 MG cells using RNF20 antibody (85630-6-RR, Clone: 243078G12) at dilution of 1:500 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 85630-6-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using RNF20 antibody (85630-6-RR, Clone: 243078G12 ) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red). This data was developed using the same antibody clone with 85630-6-PBS in a different storage buffer formulation.