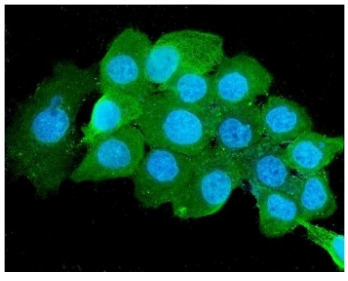
B2M Antibody / Beta 2 Microglobulin [clone 2H10] (RQ4629)

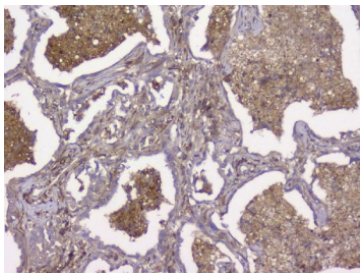
Catalog No.	Formulation	Size
RQ4629	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

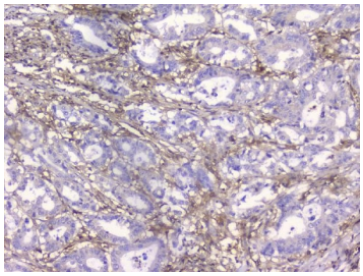
Availability	1-3 business days
Species Reactivity	Human, Monkey
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b
Clone Name	2H10
Purity	Protein G affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P61769
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml Flow Cytometry : 1-3ug/10^6 cells Immunofluorescence : 2-4ug/ml
Limitations	This B2M antibody is available for research use only.



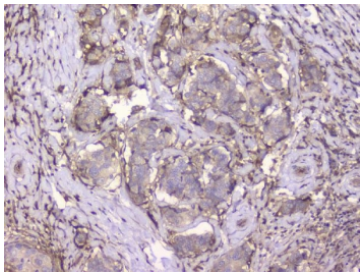
Immunofluorescent staining of FFPE human A431 cells with B2M antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



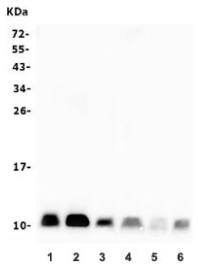
IHC staining of FFPE human lung cancer with B2M antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



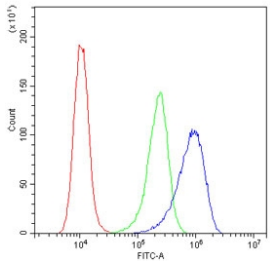
IHC staining of FFPE human intestinal cancer with B2M antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human breast cancer with B2M antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) monkey COS-7 and human 2) HeLa, 3) HL-60, 4) HepG2, 5) K562 and 6) 293T lysate with B2M antibody. Predicted molecular weight ~14 kDa.



Flow cytometry testing of human A431 cells with B2M antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= B2M antibody.

Description

Beta-2 microglobulin also known as B2M is a component of MHC class I molecules, which are present on all nucleated cells (excludes red blood cells). In humans, the beta-2-microglobulin protein is encoded by the B2M gene. The protein has a predominantly beta-pleated sheet structure that can form amyloid fibrils in some pathological conditions. The encoded antimicrobial protein displays antibacterial activity in amniotic fluid. A mutation in this gene has been shown to result in hypercatabolic hypoproteinemia.

For additional research on beta-2 microglobulin expression, MHC class I complexes and antigen presentation, including a protein microarray validated reagent, see our Beta-2 Microglobulin Antibody / MHC Class I Component Antibody page.

Application Notes

Optimal dilution of the B2M antibody should be determined by the researcher.

Immunogen

Amino acids Q22-M119 from the human protein were used as the immunogen for the B2M antibody.

Storage

After reconstitution, the B2M antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.