PRODUCT INFORMATION SHEET

Monoclonal antibody against polyomavirus

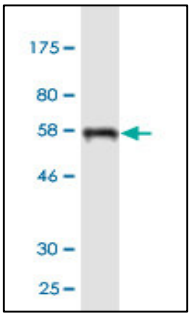
PURE RUO REF IQP-562P

RUO ***For Research Use Only***

Description

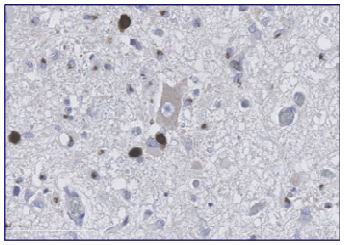
Clone	3B2
Isotype	IgG1 kappa
Host	Mouse
Specificity	Recognizes the VP1 protein of polyomavirus (such as BK and JC).
Immunogen	BKV VP1 (YP_717939.1, 1 a.a. ~ 369 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 kDa.
Applications	This antibody specifically recognizes polyomavirus and can be used for research on paraffin embedded sections of JC infected brain of BK infected kidney.

Representative Data

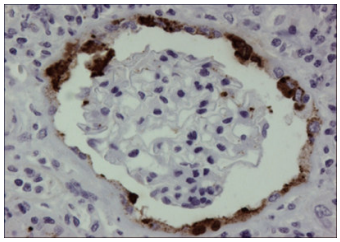


Western Blot detection against Immunogen (67 KDa)

Immunohistochemistry analysis of JC Virus infected brain



Immunohistochemistry analysis of BK Virus infected kidney



Reagents, materials and equipment required but not supplied

1. Xylene
2. Ethanol
3. Micropipette with disposable tips
4. Deionized water
5. Buffers allowing antigen retrieval
6. Hydrogen peroxide 3%
7. Blocking solution
8. Biotinylated secondary antibody
9. PBS (phosphate-buffered saline)
10. Substrate solution (such as DAB)
11. Mayer's hematoxylin
12. Mounting medium
13. Microwave
14. Microscope

General protocol for indirect immunohistochemistry

Note: This protocol is a general guideline for using polyomavirus antibody in an immunohistochemical application. Optimal conditions for each specific system must be determined empirically.

1. Deparaffinization/Rehydration
   a. Wash sections three times with xylene for 5 minutes each.
   b. Wash sections two times with100% ethanol for 10 minutes each.
   c. Wash sections two times with 95% ethanol for 10 minutes each.
   d. Wash sections two times in deionized water for 5 minutes each.

Note: do not allow sections to dry in-between washing steps.

2. Pre-treat (antigen retrieval) the sample with one of the following methods:
   A) No treatment at all.
   B) Bring samples to boil in 10 mM sodium citrate buffer (pH 6.0) followed by sub-boiling for 5-15 minutes. Cool sample subsequently.
   C) Place sample in 10 mM Tris/ 1mM EDTA buffer (pH 9.0) and microwave at 750W for 15-25 minutes. Cool sample subsequently.
   D) Place sample in HCl (2N) (pH 0.6~0.9) at room temperature for 10-20 minutes.
   E) Place sample in pepsin solution (0.5% pepsin in 5mM HCl) and shake for 10-20 minutes at 37°C.
   F) Place sample in 0.1% trypsin and shake for 15-25 minutes at 37°C.

3. Wash sections three times with deionized water for 5 minutes each.

4. Incubate sections in 3% hydrogen peroxide for 10 minutes.

5. Wash sections three times with deionized water for 5 minutes each.

6. Incubate sections in blocking solution (e.g. 0.1 to 5% bovine serum albumin (BSA), gelatin or nonfat dry milk in 1X PBS) for 10 minutes.

7. Add primary antibodies (diluted in blocking solution, optimal antibody concentration should be determined empirically) and incubate the sections overnight at 4°C, wash sample with 1X PBS afterwards.

8. Incubate sections with biotinylated secondary antibody for 30 min followed by washing the sections with PBS.

9. Application of substrate solution (DAB or other suitable peroxidase substrate). Wash sample thoroughly under running tap water.

10. Counter stain the samples in Mayer's hematoxylin.

11. Dehydrate and mount samples.

12. Analyze samples by microscopy.

Handling and Storage

Polyomavirus antibody is supplied in 100 µg per vial. It is supplied in 1X phosphate-bufferd saline, pH 7.2. Store the vials at -20 °C. Monoclonal antibodies should be protected from prolonged exposure to light. Reagents are stable for the period shown on the vial label when stored properly.

Warranty Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, which extend beyond the description on the label of the product. IQ Products is not liable for property damage, personal injury, or economic loss caused by the product.

Characterization

To ensure consistently high-quality reagents, each batch of monoclonal antibody is tested for conformance with characteristics of a standard reagent. Representative immunohistochemistry data is included in this data sheet.

Warning Handling should be done by trained staff only.

References

1. Nickeleit V, Singh HK, Mihatsch MJ. Latent and productive polyomavirus infections of renal allografts: morphological, clinical, and pathophysiological aspects. Adv Exp Med Biol. 2006;577:190-200.
2. Pavan M, Ranganath R, Chaudhari AP, Mehta HJ. Polyomavirus associated nephropathy presenting five years after kidney transplantation. Arab J Nephrol Transplant. 2011 May;4(2):87-90.
3. Thakur R, Joshi K, Minz M, Singla A, Nada R, Arora S, Jha V, Sakhuja V. Dual positivity of donor and recipient plasma for BK virus confers a high risk for development of bk nephropathy in renal allograft. Transplant Proc. 2012 Apr;44(3):717-20.

Explanation of used symbols

	Consult instructions for use
REF	Catalogue number
	Sufficient for
	Caution, consult accompanying document
	Keep away from (sun)light
	Biological risks
	Temperature limitation (°C)
RUO	For Research Use Only
LOT	Batch code
	Use by yyyy-mm-dd
	Manufacturer
EC REP	Authorized Representative in the European Community
CE	Conformité Européenne (European Conformity)

IQ Products BV

Rozenburglaan 13a
9727 DL Groningen, The Netherlands

+31 (0)50 57 57 000
+31 (0)50 57 57 002
Technical marketing@iqproducts.nl
Orders orders@iqproducts.nl
www.iqproducts.nl