

## BK VIRUS, PCR, QUANTITATIVE

BK VIRUS, PCR, QUANTITATIVE (Real Time PCR)
BK Virus
copies / mL

### Interpretation

RESULT in copies/mL	REMARKS
Not detected	Sample provided does not contain BKV DNA
<50	BKV DNA detected
50 to $1 \times 10^9$	BKV DNA detected within the linear range of the assay
$>1 \times 10^9$	BKV DNA detected above the linear range of the assay
Indeterminate	Indicates presence of Inhibitors in the sample

### Note:

1. All Indeterminate results should be retested
2. The detection limit of the assay is 50 copies/ml
3. Contaminated samples may be falsely positive
4. This is an in house developed assay
5. This test should not be used to screen healthy patients. It is to be used for patients with clinical history or risk factors for BKV disease
6. Test conducted on Urine / Plasma

### Comment

BK Virus (BKV) is an important cause of Interstitial nephritis and associated Nephropathy in recipients of kidney transplants. Upto 5% of renal allograft recipients can be affected by BKV about 40 weeks post transplantation. Presence of BKV DNA in plasma reflects the dynamics of the disease – conversion of plasma from negative to positive for BKV DNA post transplantation, persistence of Nephropathy and reduction in BKV DNA levels after initiating Immunosuppressive therapy. BKV DNA is detectable in urine prior to plasma and hence serves as an indication of impending BKV nephropathy. Viral Loads  $>100,000$  copies / mL in urine also indicate a risk for BKV Nephropathy.

### Uses

- As a prospective and diagnostic marker for the development of BKV Nephropathy in Renal transplant recipients.
- Serial determinations of urine specimens for BKV are used to monitor increasing risk of development of Nephropathy or treatment efficacy.