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CERTIFICATE OF ANALYSIS

rRibonuclease Inhibitor VI (cGMP)

Part Number: I104
Lot Number: XXXXX
Storage Temperature: -20°C

Source:	*E.coli*
Size:	Bulk
Concentration:	40 U/µL
Storage Buffer:	20 mM HEPES-KOH (pH 7.6) at 4^{0}C., 50 mM KCl, 8 mM DTT and 50% glycerol (v/v)
Purity:	>95% by SDS-PAGE
Unit Definition:	One unit is the amount of enzyme required to inhibit by 50% the activity of 5 ng of RNase A at 25^{0}C (This inhibitor activity is determined by its ability to inhibit hydrolysis of cyclic cytidine 2': 3'-monophosphoric acid). 200 units of enzyme give 50% inhibition of 1 µg of RNase A.
Quality Control:	Nuclease activity: 1 µg EcoR I /Hind III fragments of lambda DNA were incubated with enzyme in 50 µl of 50 mM Tris-HCl, 10 mM $MgCl_2$, 0.1 mM EDTA, and 7 mM β-Mercaptoethanol, pH 7.5 for 1 hour at 37^{0}C. > 400 units of enzyme showed no alteration of the banding pattern. Nicking Activity: 1 µg supercoiled DNA were incubated with enzyme in 50 µl of 50 mM Tris-HCl, 10 mM $MgCl_2$, 0.1 mM EDTA, and 7 mM β-Mercaptoethanol, pH 7.5 for 1 hour at 37^{0}C. > 400 units of enzyme showed no alteration of the no relaxation of supercoiled DNA. RNase Activity: 5 µg of MS2 RNA were incubated with enzyme in a final volume of 50 µl for 1 hour at 37^{0}C. > 400 units of enzyme showed no degradation of MS2 RNA. RNase Activity after inactivation: 5 µg of MS2 RNA were incubated with enzyme for 10 minutes at 65^{0}C following an incubation for 1 hour at 37^{0}C in a final volume of 50 µl. Up to 160 units of enzyme showed no degradation of MS2 RNA.
Expiration:	Twelve months from shipment date
Storage and Handling:	–20°C

The performance of this product is guaranteed for twelve months from the date of purchase if stored and handled properly. Unless specified otherwise, all Alator Biosciences products are sold for research use only.