

Double-stranded RNA (dsRNA) ELISA Kit (J2 based)

Cat.No. L01020

Key Features



Dual J2 Antibody Usage

- J2 antibody was used as both Capture antibody and Detection antibody.



Short Assay Time

- 3 hours



Wide Linear Range

- 0.123-30 ng/mL

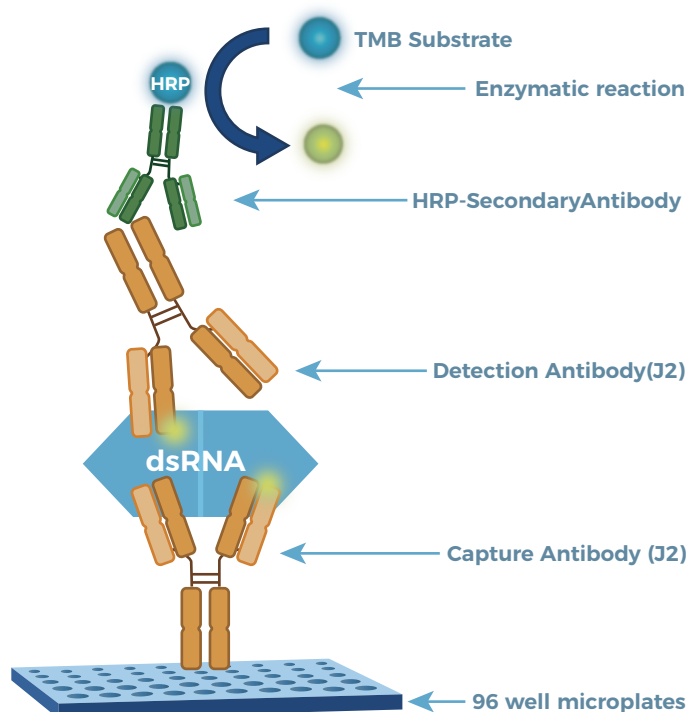


Various dsRNA standard options

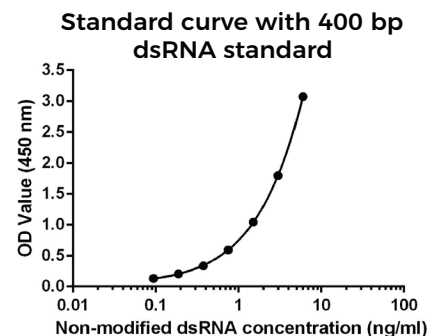
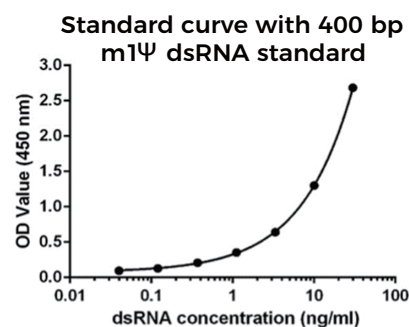
- 400-bp m1Ψ dsRNA standards prepared in the kit.
- Individual dsRNA standard with different sequence, length and modification including 5-methylcytidine (m5C), 5-methyluridine (m5U) and N1-methylpseudouridine (m1Ψ) can be provided.

*GenScript can offer different dsRNA standards with the technologies published by Moderna and BioNTech researchers.

Assay Principal



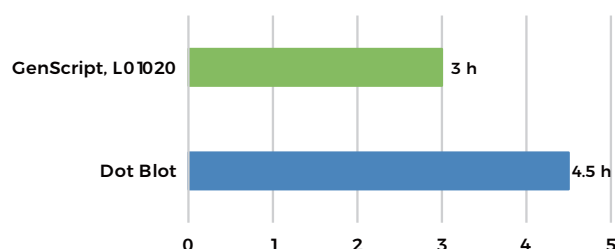
Standard Curve



Validation Data

▼ Short Assay Time

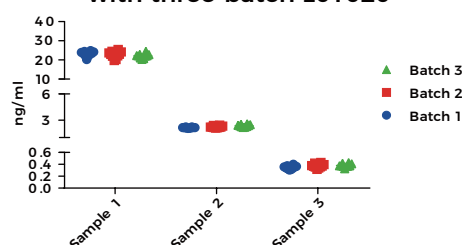
dsRNA ELISA Kit VS Dot Blot



✓ The testing time for L01020 is 3 hours.

▼ High Assay Precision

Inter-assay and Intra-assay CV calculation with three-batch L01020



✓ Intra-assay CV $\leq 10\%$ and Inter-assay CV $\leq 10\%$.

▼ Excellent Dilution Linearity

Dilution Factor	Expected dsRNA Conc. (ng/mL)	Measured dsRNA Conc. (ng/mL)	Accuracy%
1000	0.738	0.755	102.3
100	0.738	0.787	106.6
50	0.738	0.799	108.3

*Using L01020 to test different dilution factor of the same sample to evaluate dilution linearity.

✓ The results of L01020 are not affected by the dilution factor.

▼ High Specificity

dsRNA Conc. (ng/mL)	mRNA Conc. (ng/mL)	Measured dsRNA Conc. (ng/mL)	Accuracy%
30	300	27.79	92.6
30	30	28.21	94.0
0.123	300	0.138	112.2
0.123	30	0.115	93.5

*Two concentrations (ULOQ 30 ng/mL and LLOQ 0.123 ng/mL) of samples were spiked with different amounts of mRNA (30 ng/mL and 300 ng/mL) to evaluate the specificity of L01020.

✓ The results of L01020 are not affected by the matrix.