

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

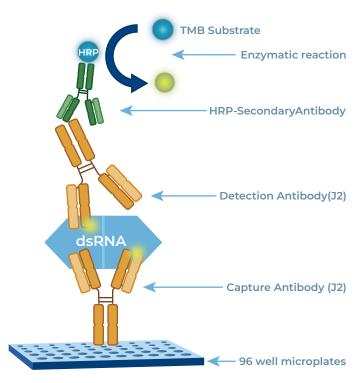


Various dsRNA standard options

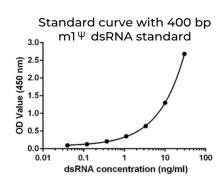
- 400-bp mlΨ dsRNA standards prepared in the kit.
- Individual dsRNA standard with different sequence, length and modification including 5-methylcytidine (m5C), 5-methyluridine (m5U) and N1-methylpseudouridine (m1\Pu) can be provided.

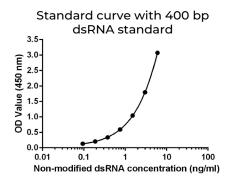
*GenScript can offer different dsRNA standards with the technologies published by Moderna and BioNTech researchers.

Assay Principal



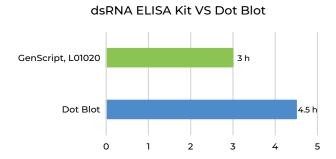
Standard Curve





Validation Data

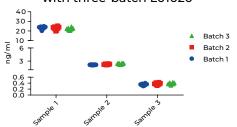
▼ Short Assay Time



√ The testing time for L01020 is 3 hours.

▼ High Assay Precision

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



 $\sqrt{\text{Intra-assay CV}}$ ≤ 10% and Inter-assay CV ≤ 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.

 $\sqrt{}$ 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.

 $\sqrt{}$ The results of L01020 are not affected by the matrix.

