

### **CATALOG & PRICING**

Cat. #	Description	Size
<b>VE101-10</b>		10 Each
VE101-50	Chemiluminescent ELISA 96-	50 Each
VE101-100	well microplate	100 Each

#### BACKGROUND

The MxBind<sup>™</sup> 96-well polystyrene microplate is pretreated to have a high-binding capacity for proteins and biomolecules that have hydrophilic and hydrophobic structures. It is also optimized for binding large amounts of immunoglobins, suitable for ELISA assays. We regularly tested the MxBind<sup>™</sup> 96-well polystyrene microplate in the chemiluminescent ELISA assay and used it in the SARS-CoV-2 antigen detection and enrichment kits.

#### **PRODUCT FEATURES**

- High binding capacity for hydrophilic and hydrophobic biomolecules
- Round bottom for thorough washing
- White non-transparent walls for chemiluminescent ELISA tests
- Suitable for both antigen and antibody coating

#### **PRODUCT DETAILS**

**COLOR** White

#### Воттом Shape

U-Shaped

**STERILITY** Non-sterile

#### **RECOMMENDED WORKING VOLUME**

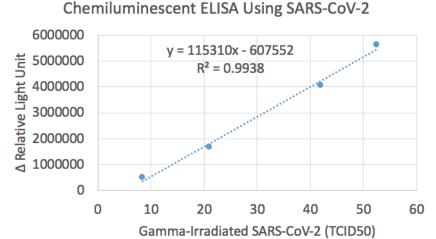
100-230 μL

#### STORAGE

Room temperature; dry

# MxBIND<sup>™</sup>96-WELL MICROPLATE #VE101

## VALIDATION DATA



**Figure 1.** Chemiluminescent ELISA using SARS-CoV-2. Different concentrations of gamma-irradiated SARS-CoV-2 viruses were lysed in the Viral Lysis Buffer (Cat# VL101) and coated (150  $\mu$ L) on the MxBind<sup>TM</sup> microplate (Cat# VE101) wells. Rabbit monoclonal anti-N antibody (Cat# VYN7, 1:10,000 dilution) and HRP-conjugated highly cross-adsorbed goat anti-rabbit secondary antibody (Cat# 202, 1:20,000) were used to detect the SARS-CoV-2 N protein. PiQ<sup>TM</sup> ECL substrates (Cat# 636) were used to produce chemiluminescent signals. RLU, relative light unit.  $\Delta$ RLU = RLU of the well with the primary antibody - RLU of the corresponding well without the primary antibody, everything else being equal.

Table 1. Comparison of ShQ <sup>™</sup> ECL and PiQ <sup>™</sup> ECL sensitivity using MxBind <sup>™</sup> 96-well polystyre	ene
microplate.	

	ShQ™ ECL			PiQ <sup>™</sup> ECL		
	w/o 1st			w/o 1st	w/1st	
	Ab	w/1stAb	$\Delta$ RLU	Ab	Ab	$\Delta$ RLU
Lysis buffer	3056	2927	-129	130727	137531	6804
Lysis buffer w/o 2nd Ab	2860	2607	-253	122382	127826	5444
105 TCID <sub>50</sub> SARS-CoV-2	2781	73695	70914	128401	8817960	8689559
52.5 TCID <sub>50</sub> SARS-CoV-2	2987	30316	27329	134264	5748869	5614605
42 TCID <sub>50</sub> SARS-CoV-2	2726	23527	20801	128083	4198178	4070095
21 TCID <sub>50</sub> SARS-CoV-2	2767	10342	7575	131388	1797070	1665682
8.4 TCID <sub>50</sub> SARS-CoV-2	2901	4143	1242	129277	635622	506345

Notes:

- Different concentrations of gamma-irradiated SARS-CoV-2 coronaviruses were lysed in the Viral Lysis Buffer (Cat# VL101) and coated (150 µL) on MxBind<sup>™</sup> 96-well polystyrene microplate (Cat# VE101) wells.
- 2. A rabbit monoclonal anti-N primary antibody (Cat# VYN7, 1:10,000) and an HRP-conjugated highly cross-adsorbed goat anti rabbit IgG secondary antibody (Cat# 202, 1:20,000) were used to detect SARS-CoV-2 N protein.
- 3. ShQ<sup>TM</sup> ECL (Cat# 707) and PiQ<sup>TM</sup> ECL (Cat# 636) substrate were used to generate chemiluminescent signals.
- **4.** RLU, relative light unit.  $\Delta RLU = RLU$  of the well with the primary antibody RLU of the corresponding well without the primary antibody, everything else being equal.