



DATA SHEET

PRODUCT NAME Anti-SARS-CoV-2 RBD Omicron-variant specific monoclonal antibody (clone 304)

REPOSITORY REFERENCE 101118-A

LOT NUMBER OFD

DESCRIPTION An Omicron RBD/ spike-specific mouse monoclonal antibody to SARS-CoV-2 Omicron.

The plasmid expressing the monoclonal antibody was sequenced and transfected in CHO cells for 10-liter scale production. Accelerated stability studies to evaluate the effect of 3 freeze-thaw cycles and exposure to 40°C for 3 days were conducted on the purified antibody. No differences in antibody stability were observed by size exclusion ultraperformance liquid chromatography and capillary electrophoresis SDS under the accelerated conditions studied.

Antibody clone 304 was found to recognise the Omicron SARS-CoV-2 RBD and spike antigens while not detecting Wuhan, Delta, or Gamma variants.

SPECIFICITY

| Reactivity | Variant | Protein | Expression |
|------------|-----------------|---------|------------|
| - | Wuhan* | RBD | Yeast |
| - | Delta* | RBD | Yeast |
| + | Omicron BA.4/5* | RBD | Yeast |
| - | Beta | RBD | HEK293 |
| - | Delta | RBD | HEK293 |
| - | Gamma | RBD | HEK293 |
| + | Omicron BA.1* | RBD | HEK293 |
| + | Omicron BA.2* | RBD | HEK293 |
| + | Omicron BA.4 | RBD | HEK293 |
| - | Wuhan* | Spike | Insect |
| - | Delta* | Spike | Insect |
| + | Omicron BA.1* | Spike | Insect |
| - | Wuhan | Spike | NDV-spike |

* Antigens are shown in sample ELISA specificity in Figure 1.

Table 1. Specificity of antibody clone 304 binding to antigen variants

| | | |
|---|--------------|--------------------------------|
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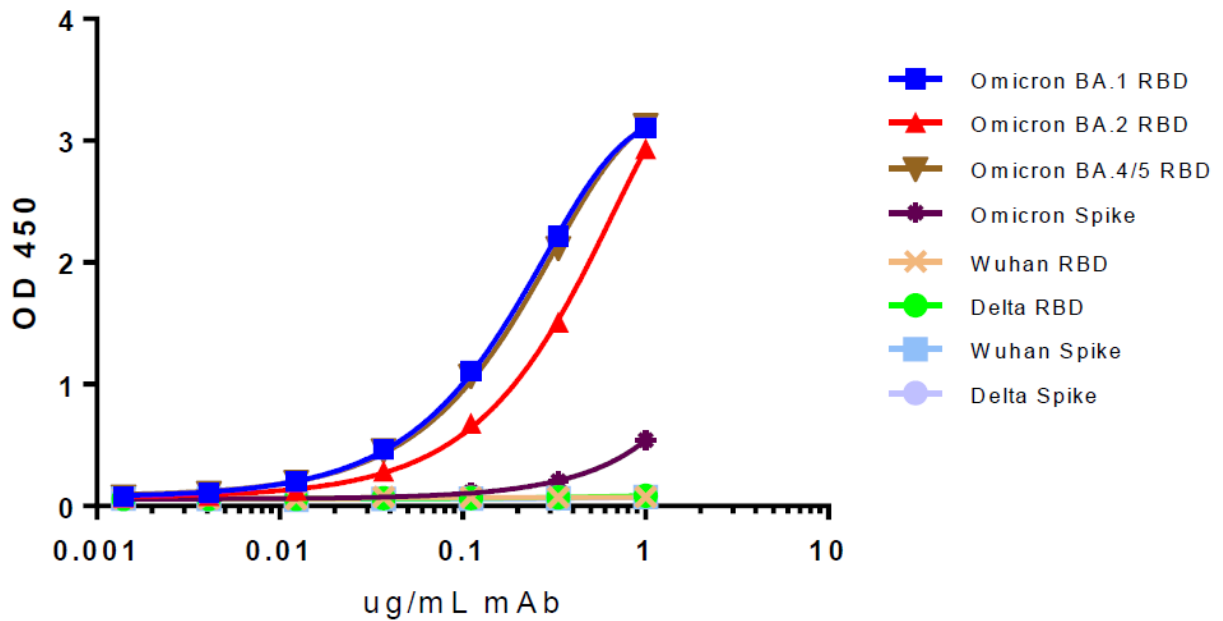


Figure 1. Antibody clone 304 specificity. Dilutions of the purified clone 304 CHO antibodies were used to detect immobilized antigens on ELISA plates (*Antigens shown in Table 1).

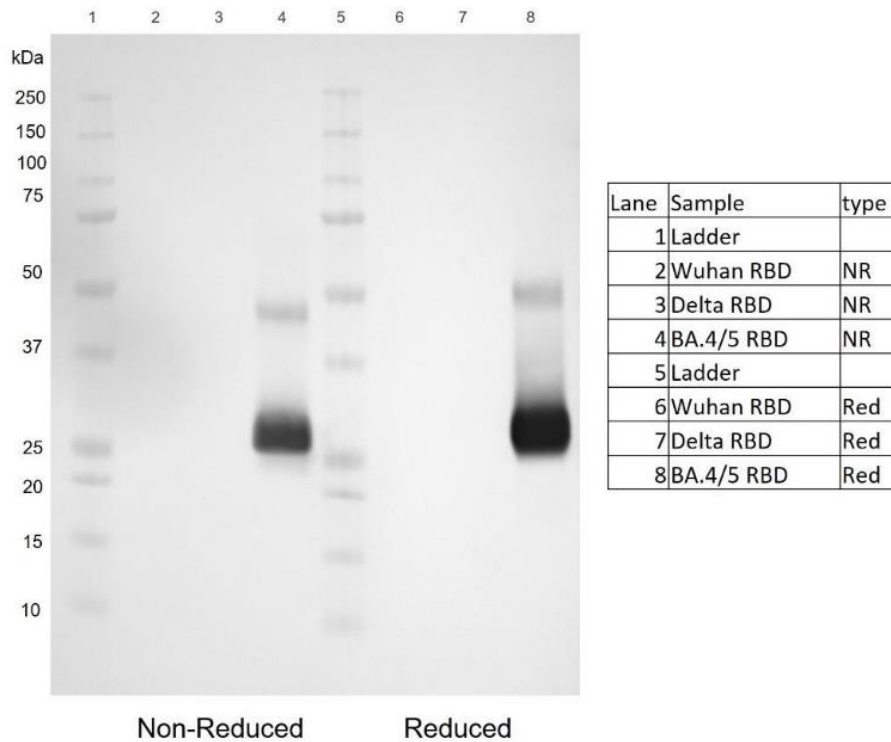


Figure 2. Western blot using antibody clone 304.

| | |
|------------------------|------------------------|
| PROVIDED | 200µg (5.01 mg/mL) |
| STORAGE | -80°C |
| DEPOSITOR | Jessica White, PATH |
| ADDITIONAL INFORMATION | Available upon request |

ACKNOWLEDGEMENTS

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MATERIAL SAFETY SHEET



| Physical properties (at room temperature) | |
|---|--|
| Physical appearance | Clear, liquid |
| Fire hazard | None |
| Chemical properties | |
| Stable | Yes |
| Corrosive: | No |
| Hygroscopic | No |
| Oxidising: | No |
| Flammable | No |
| Irritant: | No |
| Other: This product is a genetically modified material; it is the responsibility of the end user to seek local biosafety approval for the storage and handling of the material in their workplace | |
| Handling: CAUTION - This preparation is not for administration to humans or animals in the human food chain. This preparation is hazardous to health. It should be used and discarded according to your own laboratory's safety procedures. Such safety procedures should include the wearing of protective clothing, gloves, and avoiding the generation of aerosols. | |
| Toxicological properties | |
| Effects of inhalation: | Not established, avoid inhalation |
| Effects of ingestion: | Not established, avoid ingestion |
| Effects of skin absorption: | Not established, avoid contact with skin |
| Suggested First Aid | |
| Inhalation | Seek medical advice |
| Ingestion | Seek medical advice |
| Contact with eyes | Wash with copious amounts of water. Seek medical advice. |
| Contact with skin | Wash thoroughly with water. |
| Action on Spillage and Method of Disposal | |
| Spillage of vial contents should be taken up with absorbent material wetted with an appropriate virucidal agent. Rinse area with a virucidal agent followed by water. | |