# WashU

## Office of Technology Management

# MOUSE MONOCLONAL ANTIBODIES AGAINST SARS-COV-2 SPIKE PROTEIN

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T-019470

**Species:** Mouse

**Target:** SARS-CoV-2 spike protein

**Applications:**

- **Research tool -** western blot, flow cytometry, ELISA, neutralization assays
- **Diagnostics** – antigen detection assay for COVID-19 infection
- **Vaccine development**

**Data:** See table below for library of antibodies, inventor can recommend specific clones based on intended application.

**Related Web Links:** Diamond Profile

## Available Antibodies

| Ab: | Well # | Final Boost | flow cytometery | ELISA (Spike) | ELISA (RBD) | % neutralization | Ab: | Well # | Final Boost | flow cytometery | ELISA (Spike) | ELISA (RBD) | % neutralization |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SARS2-01 | 2D6 | RBD | +++ | 2.547 | 1.858 | 98 | SARS2-44 | 16A7 | RBD | +++ | 2.958 | 1.828 | 92 |
| SARS2-02 | 3B9 | RBD | +++ | 2.751 | 2.445 | 100 | SARS2-45 | 16B9 | RBD | weak | 0.056 | 0.054 | 42 |
| SARS2-03 | 4A6 | RBD | +++ | 2.615 | 2.219 | 73 | SARS2-46 | 20F5 | RBD | +++ | 1.941 | 1.909 | 61 |
| SARS2-04 | 7F5 | RBD | +++ | 2.373 | 0.691 | -11 | SARS2-47 | 21A6 | spike | +++ | 2.618 | 0.051 | 68 |
| SARS2-05 | 8B6 | RBD | +++ | 2.816 | 1.837 | 57 | SARS2-48 | 1F7 | RBD | +++ | 2.94 | 1.565 | 81 |
| SARS2-06 | 11G10 | RBD | +++ | 2.203 | 1.733 | -29 | SARS2-49 | 10C1 | RBD | +++ | 2.451 | 2.285 | 87 |
| SARS2-07 | 12A7 | RBD | +++ | 3.097 | 2.724 | 90 | SARS2-50 | 33C1 | spike | +++ | 2.732 | 0.271 | 84 |
| SARS2-08 | 12B4 | RBD | +++ | 3.098 | 2.718 | 38 | SARS2-51 | 33H3 | spike | +++ | 2.943 | 0.152 | 52 |
| SARS2-09 | 13H6 | RBD | +++ | 2.424 | 2.357 | 79 | SARS2-52 | 2C12 | RBD | neg | 0.312 | 0.059 | 62 |
| SARS2-10 | 14E10 | RBD | +++ | 2.699 | 2.554 | 87 | SARS2-53 | 30C9 | spike | +++ | 3.152 | 3.163 | 71 |
| SARS2-11 | 25G4 | spike | +++ | 2.569 | 0.048 | 5 | SARS2-54 | 28C1 | spike | +++ | 3.257 | 3.404 | 50 |
| SARS2-12 | 26F3 | spike | +++ | 2.834 | 0.075 | 48 | SARS2-55 | 10B6 | RBD | +++ | 3.312 | 3.457 | 100 |
| SARS2-13 | 29G4 | spike | +++ | 2.67 | 0.063 | -8 | SARS2-56 | 24H9 | spike | +++ | 3.069 | 0.127 | 52 |
| SARS2-14 | 29G10 | spike | +++ | 2.969 | 1.904 | 38 | SARS2-57 | 29F12 | spike | +++ | 3.172 | 0.233 | 40 |
| SARS2-15 | 29G11 | spike | +++ | 2.184 | 1.756 | 88 | SARS2-58 | 31H12 | spike | +++ | 2.77 | 2.804 | 96 |
| SARS2-16 | 30E2 | spike | +++ | 2.641 | 2.256 | 98 | SARS2-59 | 37A1 | spike | weak | 0.661 | 0.529 | 24 |
| SARS2-17 | 37A5 | spike | +++ | 2.774 | 0.048 | -21 | SARS2-60 | 33H5 | spike | +++ | 1.236 | 0.07 | 10 |
| SARS2-18 | 37B10 | spike | +++ | 2.765 | 2.309 | 88 | SARS2-61 | 15G10 | RBD | +++ | 2.595 | 2.536 | 63 |
| SARS2-19 | 37D8 | spike | +++ | 2.82 | 2.55 | 96 | SARS2-62 | 18C11 | RBD | +++ | 2.587 | 2.687 | 45 |
| SARS2-20 | 38G8 | spike | +++ | 2.234 | 0.06 | 55 | SARS2-63 | 2A10 | RBD | +++ | 0.985 | N/D | N/D |
| SARS2-21 | 16F4 | RBD | +++ | 1.774 | 1.308 | 99 | SARS2-64 | 25C6 | spike | +++ | 1.655 | N/D | N/D |
| SARS2-22 | 21E1 | spike | +++ | 2.84 | 1.961 | 100 | SARS2-65 | 25G2 | spike | +++ | 1.376 | N/D | N/D |
| SARS2-23 | 22H3 | spike | +++ | 2.743 | 2.07 | 93 | SARS2-66 | 35H3 | spike | +++ | 1.224 | N/D | N/D |
| SARS2-24 | 27B9 | spike | +++ | 2.086 | 0.064 | 4 | not cloned | 17E9 | RBD | +++ | 2.726 | 2.407 | 38 |
| SARS2-25 | 30E9 | spike | +++ | 2.782 | 2.402 | 90 | not cloned | 20B10 | RBD | +++ | 2.408 | 1.815 | 29 |

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|---|---|---|---|---|---|---|
| SARS2-26 | 30H6 | spike | +++ | 2.714 | 0.058 | 5 |
| SARS2-27 | 31D6 | spike | +++ | 2.783 | 0.063 | -18 |
| SARS2-28 | 32D1 | spike | +++ | 2.119 | 0.055 | -10 |
| SARS2-29 | 34E10 | spike | +++ | 2.973 | 0.07 | 37 |
| SARS2-30 | 37F2 | spike | +++ | 2.776 | 0.061 | 43 |
| SARS2-31 | 39E8 | spike | +++ | 2.755 | 2.594 | 100 |
| SARS2-32 | 7B9 | RBD | +++ | 3.097 | 2.602 | 100 |
| SARS2-33 | 16G6 | RBD | weak | 2.038 | 0.613 | 0 |
| SARS2-34 | 28E10 | spike | +++ | 2.995 | 2.659 | 94 |
| SARS2-35 | 38H12 | spike | +++ | 2.64 | 0.13 | 31 |
| SARS2-36 | 40C12 | spike | weak | 2.631 | 0.084 | 9 |
| SARS2-37 | 20E5 | RBD | +++ | 2.594 | 1.192 | 36 |
| SARS2-38 | 40F4 | spike | +++ | 2.769 | 1.774 | 100 |
| SARS2-39 | 20H9 | spike | +++ | 2.82 | 2.276 | 87 |
| SARS2-40 | 25H3 | spike | +++ | 2.66 | 0.827 | 56 |
| SARS2-41 | 39E10 | spike | +++ | 2.816 | 2.091 | 80 |
| SARS2-42 | 4E11 | RBD | +++ | 1.74 | 1.591 | 71 |
| SARS2-43 | 12B8 | RBD | +++ | 1.517 | 1.49 | 53 |

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|---|---|---|---|---|---|---|
| not cloned | 39B3 | spike | +++ | 1.392 | 0.152 | 11 |
| not cloned | 39D12 | spike | +++ | 1.915 | 0.053 | 37 |
| not cloned | 40D11 | spike | +++ | 3.042 | 0.057 | 28 |
| not cloned | 2E6 | RBD | neg | 2.659 | 0.049 | -20 |
| not cloned | 3H3 | RBD | neg | 1.22 | 2.974 | 0 |
| not cloned | 9B3 | RBD | neg | 0.951 | 0.501 | -11 |
| not cloned | 17B5 | RBD | neg | 0.61 | 2.952 | -14 |
| not cloned | 23B10 | spike | neg | 1.513 | 0.047 | -23 |
| not cloned | 28A2 | spike | neg | 1.253 | 0.066 | -13 |
| not cloned | 34E11 | spike | neg | 1.929 | 0.049 | -32 |
| not cloned | 37C7 | spike | neg | 2.387 | 0.056 | -32 |
| not cloned | 40C6 | spike | neg | 1.051 | 0.049 | 6 |
| not cloned | 3C6 | RBD | neg | 0.052 | 0.407 | 18 |
| not cloned | 5C2 | RBD | neg | 0.541 | 0.405 | 36 |
| not cloned | 28B3 | spike | neg | 2.437 | 0.744 | 29 |
| not cloned | 8D7 | RBD | weak | 0.2 | 0.046 | 0 |
| not cloned | 38A7 | spike | neg | 1.729 | 0.067 | 0 |