

SARS/SARS-CoV-2 Spike Monoclonal Antibody (G2)

Product Details

Size:	100 µg
Species Reactivity:	SARS-COV2 Virus
Published Species:	SARS-COV2 Virus
Host/Isotype:	Mouse / IgG1
Class:	Monoclonal
Type:	Antibody
Clone:	G2
Conjugate:	Unconjugated
Immunogen:	SARS Spike protein RBD preparation.
Form:	Liquid
Concentration:	0.1 mg/mL
Purification:	Protein A/G
Storage buffer:	PBS, pH 7.2
Contains:	0.1% Sodium Azide
Storage conditions:	4° C

Applications Tested Dilution

Western Blot (WB)	1:10 - 1:50
Immunohistochemistry (IHC)	1:100
Immunohistochemistry (Paraffin) (IHC (P))	1:100
Immunohistochemistry (PFA fixed) (IHC (PFA))	1:100
Immunocytochemistry (ICC/IF)	1:100
ELISA (ELISA)	1:20 -1:200

Product Specific Information

- G2 is reactive with the Spike protein of SARS-CoV-2 (COVID-19 virus) by ELISA.
- Negative for human coronaviruses HCoV-229E, HCoV-OC43, HCoV-NL63 and HCoV-HKU1.
- ELISA dilution range suggested 1:20- 1:400.
- The G2 antibody reacts with SARS Coronavirus spike protein RBD in viral and infected tissue samples.
- G2 has been successfully used in ELISA, Western blot and Immunofluorescence applications.
- The G2 antibody was raised against a SARS virus spike protein RBD preparation.

Publications

1. Evangelou K, Veroutis D, Paschalaki K, et al. Pulmonary infection by SARS-CoV-2 induces senescence accompanied by an inflammatory phenotype in severe COVID-19: possible implications for viral mutagenesis. *Eur Respir J* 2022; 60: 2102951 [DOI: 10.1183/13993003.02951-2021].
2. Denholm M, Rintoul RC, Muñoz-Espín D. SARS-CoV-2-induced senescence as a potential therapeutic target. *Eur Respir J* 2022; 60: 2201101 [DOI: 10.1183/13993003.01101-2022].
3. Belogiannis, K.; Florou, V.A.; Fragkou, P.C.; Feros, S.; Chatzis, L.; Polyzou, A.; Lagopati, N. Vassilakos, D.; Kittas, C.; Tzioufas, A.G.; et al. SARS-CoV-2 Antigenemia as a Confounding Factor in Immunodiagnostic Assays: A Case Study. *Viruses* 2021, 13, 1143. *Viruses*. 2021 Jun 14;13(6):1143. doi: 10.3390/v13061143.

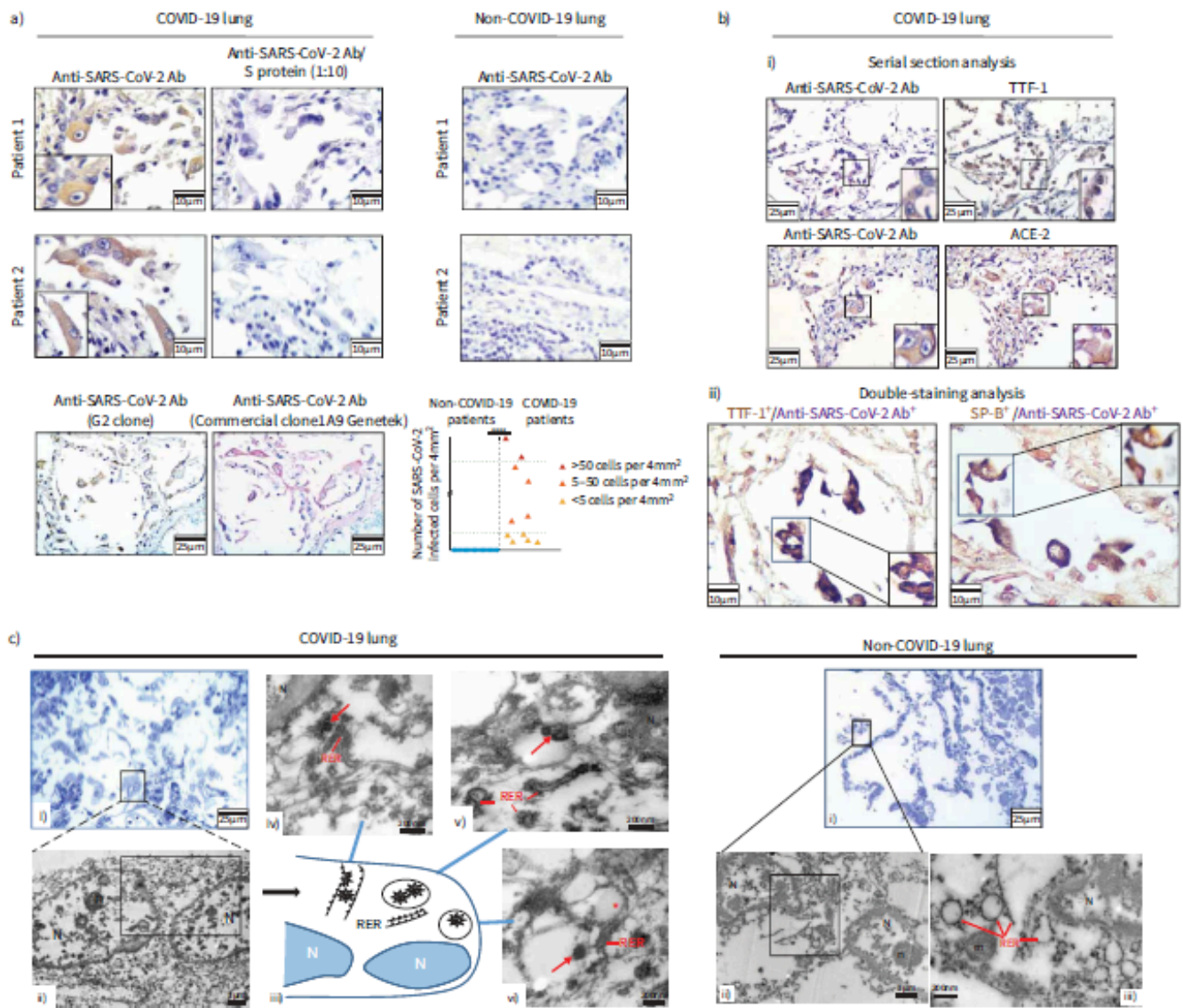


FIGURE 1 Detection of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in lung cells from patients who died of coronavirus disease 2019 (COVID-19). **a)** Representative images of SARS-CoV-2 (G2 mAb) immunohistochemistry staining in COVID-19 autopsy lung tissue. Competition with anti-peptide (S protein) showing specificity of the G2 immunostaining. Verification of G2 immunopositivity with a commercial anti-S antibody (Ab) (clone1A9 clone; Genetek). Representative negative control immunostaining in non-COVID-19 lung tissues. Graph shows quantification of SARS-CoV-2 staining in the lung samples. **b)** Detection of SARS-CoV-2 in alveolar type 2 (AT2) cells (confirmed by positive thyroid transcription factor (TTF)-1 and surfactant protein (SP)-B staining) and in angiotensin-converting enzyme (ACE)2-expressing cells (i); ii) double immunostaining is shown for SARS-CoV-2 and TTF-1. **c)** Detection of SARS-CoV-2 by transmission electron microscopy (EM) in a representative COVID-19 patient. Presence of SARS-CoV-2 (i, ii) within AT2 cells and of iii, iv) virions in the proximity of the endoplasmic reticulum, iii, v, vi) as well as in cytoplasmic vesicles. ***: $p < 0.0001$.