(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
22 June 2023 (22.06.2023)

WIPO | PCT

(10) International Publication Number
WO 2023/111892 A1

(51) International Patent Classification:
A61K 38/17 (2006.01) *A61P 31/14* (2006.01)
A61P 31/12 (2006.01)

(21) International Application Number:
PCT/IB2022/062211

(22) International Filing Date:
14 December 2022 (14.12.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
202121058651 16 December 2021 (16.12.2021) IN

(71) Applicant: **UNICHEM LABORATORIES LIMITED** [IN/IN]; Unichem Bhavan, Prabhat Estate, Off. S. V. Road, Jogeshwari (W), Mumbai, Maharashtra 400102 (IN).

(72) Inventors: **SATHE, Dhananjay**; 202/A-1, Golden Park, L.B.S. Marg, Panchpakhadi, Thane, Maharashtra 400601 (IN). **IYAPPAN, Saravanakumar**; 1-6-39/108/1, Dinakar Nagar, West Venkatapuram, Alwal, Hyderabad, Telangana 500015 (IN).

(74) Agent: **KHURANA & KHURANA, ADVOCATES & IP ATTORNEYS**; E-13, UPSIDC, Site-IV, Behind-Grand Venice, Kasna Road, Greater Noida, National Capital Region, Uttar Pradesh 201310 (IN).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report (Art. 21(3))*
— *with sequence listing part of description (Rule 5.2(a))*
— *in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE*

(54) Title: RECOMBINANT PROTEIN FOR TREATING SARS-COV2 DISEASE

(57) Abstract: The present invention relates to the protein for treatment of infectious disease caused by Coronaviridae. In particular, the invention relates to a recombinant *Sclerotium rolfsii* lectin for use in the treatment, reduction in progression and curing of SARS-COV2disease in a subject in need thereof. Pharmaceutical compositions comprising said recombinant *Sclerotium rolfsii* lectin are also described. The recombinant *Sclerotium rolfsii* lectin protein may comprise an amino acid sequence having at least 70% homology to SEQ ID NO:1.

WO 2023/111892 A1