

Supplementary table 1

Overview of all antigens included in the study

Abbreviation	Antigen	Source	Native/Recombinant	Reference for inclusion in the study
Actinin	Actinin	MyBiosource	Recombinant	Renaudineau et al.; ARTHRITIS & RHEUMATISM Vol. 54, No. 8, August 2006, pp 2523–2532; DOI 10.1002/art.22015; Seret et al.; Journal of Autoimmunity 61 (2015) 54e61
ASCA	Anti- <i>Saccharomyces cerevisiae</i> antibody	Thermo Fisher Scientific	Native	Mankaï et al.; Rheumatol Int (2013) 33:665–669 DOI 10.1007/s00296-012-2431-3
Beta2GP1	Beta 2 glycoprotein 1	Thermo Fisher Scientific	Native	Szodoray et al.; Autoimmunity, 42:6, 497-506, DOI: 10.1080/08916930902882731 Trendelenburg et al.; Nephrol Dial Transplant (2006) 21: 3115–3121 doi:10.1093/ndt/gfl436; Trendelenburg; Springer Semin Immun (2005) 27:276–285
C1q	Complement protein C1q	Complement Technology	Native	Kenyon et al.; Immunol 2011; 187:2101-2111; doi: 10.4049/jimmunol.1003468
C3b	Complement protein C3b	Complement Technology	Native	
Cardiolipin	Cardiolipin	Undisclosed due to contractual agreement	Native	Szodoray et al.; Autoimmunity, 42:6, 497-506, DOI: 10.1080/08916930902882731
CCP1arg	Cyclic citrullinated peptide (arginized)	Innovagen	Peptide	Budhram et al.; Lupus (2014) 23, 1156–1163; Skare et al.; Clin Rheumatol (2013) 32:1065–1070 DOI 10.1007/s10067-013-2213-7
CCP1cit	Cyclic citrullinated peptide	Innovagen	Peptide	Budhram et al.; Lupus (2014) 23, 1156–1163; Skare et al.; Clin Rheumatol (2013) 32:1065–1070 DOI 10.1007/s10067-013-2213-7
CENP	Centromere protein	Thermo Fisher Scientific	Recombinant	Respaldiza et al.; Scandinavian Journal of Rheumatology, 35:4, 290-294, DOI: 10.1080/03009740600588376
CMV	Cytomegalovirus	MyBiosource	Recombinant	Sekigawa et al.; Clin Exp Rheumatol 2002; 20: 559-564.
CollagenII	Collagen type 2	Undisclosed due to contractual agreement	Native	He et al.; Lupus (2015) 24, 1370–1376
CpG	Cytosine-phosphate-guanidine containint ssDNA (ODN 2216, Invivogen)	InvivoGen	DNA	Yasuda et al.; J Immunol. 2009 September 1; 183(5): 3109–3117. doi:10.4049/jimmunol.0900399
CRP	C-reactive protein	MyBiosource	Native	Meyer; Joint Bone Spine 77 (2010) 384–389
DF570	Dense Fine Speckled, 70kDa molecular weight	Thermo Fisher Scientific	Recombinant	Conrad et al.; Clin Rev Allerg Immunol (2017) 52:202–216 DOI 10.1007/s12016-016-8564-5
dsDNA	double-stranded deoxyribonucleic acid (DNA)	Thermo Fisher Scientific	DNA	Rekvig; Clinical and Experimental Immunology, 179: 5–10
Enolasearg	Enolase (arginized)	Innovagen	Recombinant	Mosca et al.; J Rheumatol 2006;33:695-697
Enolasecit	Enolase	Innovagen	Recombinant	Mosca et al.; J Rheumatol 2006;33:695-697
EphB2	Ephrin type-B receptor 2	Undisclosed due to contractual agreement	Native	Azzouz et al.; PLoS ONE 11(9): e0160283. doi:10.1371/journal.pone.0160283
FcER	Fc epsilon receptor	Thermo Fisher Scientific	Recombinant	Fiebiger et al.; J. Clin. Invest. Volume 101, Number 1, January 1998, 243–251 Plawewski et al.; PLoS ONE 11 (9): e0160879. doi:10.1371/journal.pone.0160879; Tormey et al.; International Immunology, Vol. 16, No. 9, pp. 1295–1304
Fibrillarlin	Fibrillarlin	Thermo Fisher Scientific	Recombinant	Collard et al.; Arthritis Care & Research Vol. 70, No. 8, August 2018, pp 1263–1268 DOI 10.1002/acr.23449
Ficolin	Ficolin	MyBiosource	Recombinant	Delunardo et al.; ARTHRITIS & RHEUMATOLOGY; Vol. 68, No. 11, November 2016, pp 2708–2716.; Takasaki et al.; International Immunology, Vol. 16, No. 9, pp. 1295–1304
GAPDH	Glyceraldehyde 3-phosphate dehydrogenase	Undisclosed due to contractual agreement	Native	
GBM	Glomerular basement membrane	Thermo Fisher Scientific	Recombinant	Koutsonikoli et al.; Clinical and Experimental Immunology, 188: 79–85
H2Bp	Histone H2B protein	Thermo Fisher Scientific	Peptide	Dieker et al.; PLoS ONE 11(10): e0165373. doi:10.1371/journal.pone.0165373
H2Bpac	Histone H2B protein (acetylyzed)	Thermo Fisher Scientific	Peptide	Dieker et al.; PLoS ONE 11(10): e0165373. doi:10.1371/journal.pone.0165373
H4p	Histone H4 protein	Thermo Fisher Scientific	Peptide	Dieker et al.; PLoS ONE 11(10): e0165373. doi:10.1371/journal.pone.0165373
H4pac	Histone H4 protein (acetylyzed)	Thermo Fisher Scientific	Peptide	Dieker et al.; PLoS ONE 11(10): e0165373. doi:10.1371/journal.pone.0165373
Histones	Histones	Thermo Fisher Scientific	Native	Dieker et al.; PLoS ONE 11(10): e0165373. doi:10.1371/journal.pone.0165373
IFNLambda	Interferon-Lambda	MyBiosource	Recombinant	Ching et al.; PLoS ONE 7(2): e32001. doi:10.1371/journal.pone.0032001
IFNOmega	Interferon-Omega	MyBiosource	Recombinant	Ching et al.; PLoS ONE 7(2): e32001. doi:10.1371/journal.pone.0032001
Jo1	histidyl transfer ribonucleic acid (tRNA) ligase Complex of 70 and 80kDa proteins involved in DNA break repair and recombination	Thermo Fisher Scientific	Recombinant	Zandman-Goddard et al.; Clinical & Developmental Immunology, June 2005; 12(2): 107–111
Ku	break repair and recombination	Diarect	Native	Cavazzana et al.; Lupus (2008) 17, 727–732
La/SSB	La Protein	Thermo Fisher Scientific	Recombinant	Hochberg et al.; Medicine, Vol. 64 No. 5 (1985)
MBL	Mannose binding lectin	MyBiosource	Recombinant	Pradhan et al.; Rheumatol Int (2013) 33:1193–1199; DOI 10.1007/s00296-012-2519-9; Seelen et al.; Clin Exp Immunol 2003; 134:335–343
Mi2	Mi-2 protein	Thermo Fisher Scientific	Recombinant	Seelig et al.; ARTHRITIS & RHEUMATISM Vol. 38, No. 10, October 1995, pp 1389-1399
Nucleosome	Nucleosome	Arotec Diagnostics	Native	Gutiérrez-Adriánzén et al.; J Rheumatol 2006;33:1538-1544
PCNA	Proliferating cell nuclear antigen	Thermo Fisher Scientific	Recombinant	Mahler et al.; Autoimmunity Reviews 11 (2012) 771–775
Pentraxin3	Pentraxin 3	MyBiosource	Recombinant	Augusto et al.; Rheumatology 2009;48:442–444; doi:10.1093/rheumatology/ken507

PmSci100	PM/Sci complex	Thermo Fisher Scientific	Recombinant	Mahler et al.; Autoimmunity Reviews 6 (2007) 432–437
RA33	Heterogeneous ribonucleoprotein A2/B1 (hnRNP A2B1)	Thermo Fisher Scientific	Native	Steiner et al.; Molecular Biology Reports 23:167–171, 1996.
RipP0	Ribosomal protein P0	Thermo Fisher Scientific	Recombinant	Heinlen et al.; Mol Med (Berl). 2010 July ; 88(7): 719–727. doi:10.1007/s00109-010-0618-1.; Shi et al.; Lupus (2015) 24, 588–596
RipP0pept	Ribosomal protein P0 peptide	Thermo Fisher Scientific	Peptide	Heinlen et al.; Mol Med (Berl). 2010 July ; 88(7): 719–727. doi:10.1007/s00109-010-0618-1.; Shi et al.; Lupus (2015) 24, 588–596
RipP1	Ribosomal protein P1	Thermo Fisher Scientific	Recombinant	Heinlen et al.; Mol Med (Berl). 2010 July ; 88(7): 719–727. doi:10.1007/s00109-010-0618-1.; Shi et al.; Lupus (2015) 24, 588–596
RipP2	Ribosomal protein P2	Thermo Fisher Scientific	Recombinant	Heinlen et al.; Mol Med (Berl). 2010 July ; 88(7): 719–727. doi:10.1007/s00109-010-0618-1.; Shi et al.; Lupus (2015) 24, 588–596
RNAPolIII	RNA polymerase III	Thermo Fisher Scientific	Recombinant	Cavazzana et al.; Autoimmunity Reviews 8 (2009) 580–584
RNP70	Ribonucleoprotein 70	Thermo Fisher Scientific	Recombinant	Migliorini et al.; Autoimmunity, 38:1, 47–54, DOI: 10.1080/08916930400022715
RNPA	Ribonucleoprotein A	Thermo Fisher Scientific	Recombinant	Migliorini et al.; Autoimmunity, 38:1, 47–54, DOI: 10.1080/08916930400022715
RNPC	Ribonucleoprotein C	Thermo Fisher Scientific	Recombinant	Migliorini et al.; Autoimmunity, 38:1, 47–54, DOI: 10.1080/08916930400022715
Ro52	52KDa Ro Protein	Thermo Fisher Scientific	Recombinant	Hochberg et al.; Medicine, Vol. 64 No. 5 (1985)
Ro60	60KDa Ro Protein	Thermo Fisher Scientific	Recombinant	Hochberg et al.; Medicine, Vol. 64 No. 5 (1985)
RPP25ThTo	Ribonuclease P and MRP subunit P25	Thermo Fisher Scientific	Recombinant	Mahler et al.; Autoimmunity Reviews 14 (2015) 254–257
Sci70	Topoisomerase I	Thermo Fisher Scientific	Recombinant	Mahler et al.; Autoimmunity Reviews 9 (2010) 756–760
SmBB	Small nuclear ribonucleoprotein polypeptides B and B'	Thermo Fisher Scientific	Native	Salmhofer et al.; JEADV 2007, 21, 1047–1053
SMP	Small nuclear ribonucleoprotein	Undisclosed due to contractual agreement	Recombinant	Migliorini et al.; Autoimmunity, 38:1, 47–54, DOI: 10.1080/08916930400022715
TIF1gamma	Transcriptional intermediary factor 1-gamma	Diarect	Recombinant	Hoshino et al.; Rheumatology 2010;49:1726–1733 doi:10.1093/rheumatology/keq153
TPO	Thyroid peroxidase	Thermo Fisher Scientific	Recombinant	Posselt et al.; Sao Paulo Med J. 2017; 135(6):535-40
tTG	Tissue transglutaminase	Thermo Fisher Scientific	Native	Marai et al.; Lupus (2004) 13, 241–244