

INDEX

A

- Active targeting 7
Adjuvants 13, 137, 189, 190, 192, 193
Allergens 198
Anaphylaxis 11, 150, 161
Antibodies 7, 11, 29, 65–70, 138, 142, 143, 145, 149–151, 162, 165, 169, 173, 176, 178, 179, 182, 184, 186, 190, 191, 193, 204, 205, 208
Antigens 8, 13, 70, 149, 151, 162, 189–194, 198
Autophagosomes 211, 212, 218, 219
Autophagy 211–218

B

- Bacteria 10, 19–23, 31, 136, 143
Bioanalytical 99, 118
Biodistribution 10, 19, 163
Biological matrices 12, 37–47, 223
Biology 3, 7, 10–13, 242, 246
Blood 11, 12, 91–93, 95–98, 100, 101, 103–122, 137, 150, 155, 157, 159, 162, 164, 167, 168, 174, 175, 177, 184, 191, 225, 226, 228

C

- C3 149–152, 159
Charged aerosol detector (CAD) 50–53
Chemokines 23, 173, 177
Coagulation factors 104, 105, 119, 121
Colloidal metal nanoparticles 58
Complement 12, 109, 125, 149–152, 154–157, 197
Contamination 10, 19–31, 82–84, 87, 143, 203
Cryo-electron microscopy (Cryo-EM) 73–75, 77, 80–83
Cytokines 23, 136, 137, 173–178, 180, 183–185, 187, 197

D

- Displacement 50, 52
Disseminated intravascular coagulation (DIC) 23, 104, 105
Dissolution 20, 38, 50–52, 54
Drug release 7, 9, 10, 12, 223, 241, 242

E

- Efficacy 5, 7, 8, 10, 12, 19, 24, 151, 190, 193, 241–251
Electron microscope 65–71, 73–75, 77–87, 212
Emulsions 5, 74, 82, 200
Endotoxin 10, 23–31, 104, 143, 173, 192
Enzyme-linked immunoassay (EIA) 151–153, 156

F

- Fluorescence imaging 212, 214, 215

G

- Gold nanoparticles 38, 49–51, 69, 100

H

- Hemoglobin 91–93, 95–98, 100
Hemolysis 12, 91–96, 98, 99, 158, 197
Homogenization 37–39
Human cell line activation test (hCLAT) 198–205, 207
Hypersensitivity 11, 151, 157, 161, 197–209

I

- IL-1 β 136–140, 142–146, 174, 176, 178, 179, 185, 187
Immune electron microscopy 70
Immunoassay 151
Immunostimulation 173
Immunosuppression 11, 161, 163
Indirect solid phase immunolabeling 66
Inductively coupled plasma mass spectrometry (ICP-MS) 37–47
Inflammasome 135, 137–139, 142, 143, 145
Inflammation 10, 23, 24, 125, 137, 150, 173–178, 180, 183–185, 187
Inhibition enhancement control (IEC) 143, 177, 183–186
Inorganic nanoparticles 57
Interference 23–31, 92, 95, 100, 101, 114, 139, 142, 144, 145
Interferon 173–178, 180, 183–185, 187
Irritant 197

L

- Leukocyte procoagulant activity 106, 116, 120, 121
 Leukocyte proliferation 162, 163
 Limulus amebocyte lysate (LAL) 23–31, 143
 Lipids 5, 6, 12, 27, 37, 65, 74, 75,
 80, 81, 86, 151
 Liposomes 5–7, 9, 11, 27, 28, 65, 73–75,
 77–87, 153, 200, 227, 228, 231, 232
 Local lymph node assay (LLNA) 198–200,
 204, 206–208
 Local lymph node proliferation (LLNP) 198–200,
 202, 204, 206–208
 Lysosomal dysfunction 242

M

- Microtubule-associated protein light chain
 3-I (MAP LC3) 212
 Mold 19
 Myeloid U937 skin sensitization test
 (MUSST) 198–203, 205–207

N

- Nanoformulation 3, 5, 8, 10–12, 23–31,
 94, 105, 113, 120, 128, 137, 166, 191, 199, 241,
 242, 244–247, 250, 251
 Nanomaterials 3, 10, 12, 13, 19–22, 24,
 25, 27, 29–31, 66, 68–70, 93, 94, 99, 104, 105,
 111, 113, 114, 126, 128, 137, 151, 162,
 165–167, 176, 189–192, 197, 200, 203, 204,
 211–214, 216, 218
 Nanomedicines 3–13, 174, 223, 241–251
 Nanoparticles 3–13, 19–22, 38, 46, 49,
 58, 65, 73, 92, 104, 125, 136, 151, 161, 174,
 189, 199, 225, 241, 242, 244, 251
 Negative staining 11, 65, 66, 69, 70,
 73–81, 84, 85
 NLRP3 135, 137–139, 142, 143, 145

P

- Passive targeting 6–7
 Phagocytosis 125–129, 131, 132, 197
 Plasma coagulation 104–109, 111, 112, 114–116,
 119–121
 Platelet aggregation 104, 105, 107, 109,
 111, 113, 114, 118, 120
 Platelets 104, 105, 107, 109, 111,
 113, 114, 118, 120, 122, 167
 Polyethylene glycol (PEG) 5, 6, 49–54,
 65, 66, 94, 151

R

- Red blood cells (RBC) 91, 100

S

- Sensitizer 198
 Stability 5, 10, 12, 49,
 174, 223, 231
 Stable isotope 12, 223
 Statistical analysis 131, 170, 192, 246
 Subcutaneous 151, 193,
 198, 243, 244
 Surface characterization 10, 11, 104
 Surface coatings 11, 57–63, 200

T

- T-cell dependent antibody response
 (TDAR) 162, 163, 165, 167, 168, 170
 Therapy 3, 5–8, 12, 13, 94,
 104, 108, 109, 128, 137, 150, 155,
 161, 162, 166, 173, 174, 180, 197,
 203, 211, 241, 246, 251
 Thermogravimetric analysis (TGA) 11, 57
 THP-1 137–141, 143, 198,
 200, 204, 205
 Thrombogenicity 104
 Thrombosis 12, 104
 Toxicity 3, 5, 7, 10,
 12, 19, 24, 65, 104, 137, 150,
 162, 163, 198, 251
 Transmission electron microscopy
 (TEM) 11, 69,
 73–75, 77–87
 Tumor model 242, 243, 251

V

- Vaccines 13, 137, 150, 151, 164,
 168, 189, 190, 192

W

- Western blot 137, 145, 151, 153
 Whole blood 12, 91, 92, 95–97,
 107, 109, 111, 174, 176, 180–183, 186

Y

- Yeast 20, 211

Z

- Zymosan A 126, 127, 131