

**Supplementary Table 1.** Search strategy result

((("Digestive System"[Mesh] or "Digestive System Diseases"[Mesh] or "Digestive System Abnormalities"[Mesh]) OR ("Intestines"[Mesh]) OR ("Digestive system"[Title/Abstract] OR "Alimentary System"[Title/Abstract] OR intestine\*[Title/Abstract])) AND (("Cystic Fibrosis"[Mesh]) OR ("Cystic Fibrosis"[Title/Abstract] OR "Fibrosis Cystic"[Title/Abstract] OR "CF"[Title/Abstract] OR mucoviscidosis[Title/Abstract] OR "Fibrocystic Diseases"[Title/Abstract])) AND (((((((("Leukocyte L1 Antigen Complex"[Mesh]) OR "Leukocyte L1 Antigen Complex"[Title/Abstract] OR calprotectin[Title/Abstract] OR calgranulin[Title/Abstract]) OR "Pyruvate Kinase"[Mesh]) OR ("MAP Kinase Kinase Kinase 2"[Mesh]) OR ("Pyruvate?Kinase"[Title/Abstract] OR ("MAP?Kinase"[Title/Abstract])) OR ("DEFB4A protein, human" [Supplementary Concept] OR "DEFB126 protein, human" [Supplementary Concept]) OR ("hBD?2 protein"[Title/Abstract] OR "DEFB4A protein"[Title/Abstract] OR "beta defensin"[Title/Abstract] OR "hBD?2 antibacterial peptide"[Title/Abstract])) OR ("Matrix Metalloproteinase 9"[Mesh]) OR ("Matrix Metalloproteinase?9"[Title/Abstract] OR "92?kDa Type IV Collagenase"[Title/Abstract] OR "MMP?9 Metalloproteinase"[Title/Abstract] OR "92?kDa Gelatinase"[Title/Abstract] OR "Gelatinase B"[Title/Abstract])) OR ("Matrix Metalloproteinase?9"[Title/Abstract] OR "92?kDa Type IV Collagenase"[Title/Abstract] OR "MMP?9 Metalloproteinase"[Title/Abstract] OR "92?kDa Gelatinase"[Title/Abstract] OR "Gelatinase B"[Title/Abstract])) OR ("S100A12 protein, human" [Supplementary Concept] OR "S100A12 Protein"[Mesh]) OR ("S100 A12 Protein"[Title/Abstract] OR "MRP?6 Protein"[Title/Abstract] OR "Calgranulin C Protein"[Title/Abstract] OR "EN?RAGE Protein"[Title/Abstract] OR "CAAF1 Protein"[Title/Abstract])) OR ("rectal nitric oxide"[Title/Abstract]) OR ("Osteoprotegerin"[Mesh]) OR (Osteoclastogenesis[Title/Abstract] OR "Follicular Dendritic Cell?Derived Receptor?1"[Title/Abstract] OR "Tumor Necrosis Factor Receptor Superfamily"[Title/Abstract] OR "FDCR?1 Protein"[Title/Abstract] OR "OCIF Protein"[Title/Abstract] OR "Tumor Necrosis Factor Receptor 11b"[Title/Abstract]))

**PubMed result: 212**

"Digestive System" OR "Digestive System Diseases" or "Digestive System Abnormalities" OR "Intestines" OR "Digestive system" OR "Alimentary System" OR intestine\* AND "Cystic Fibrosis" OR "Cystic Fibrosis" OR "Fibrosis Cystic" OR "CF" OR mucoviscidosis OR "Fibrocystic Diseases" AND "Leukocyte L1 Antigen Complex" OR "Leukocyte L1 Antigen Complex" OR calprotectin OR calgranulin OR "Pyruvate Kinase" OR "MAP Kinase Kinase Kinase 2" OR "Pyruvate?Kinase" OR "MAP?Kinase" OR "DEFB4A protein, human" OR "DEFB126 protein, human" OR "hBD?2 protein" OR "DEFB4A protein" OR "beta defensin" OR "hBD?2 antibacterial peptide" OR "Matrix Metalloproteinase 9" OR "Matrix Metalloproteinase?9" OR "92?kDa Type IV Collagenase" OR "MMP?9 Metalloproteinase" OR "92?kDa Gelatinase" OR "Gelatinase B" OR "Matrix Metalloproteinase 9" OR "Matrix Metalloproteinase?9" OR "92?kDa Type IV Collagenase" OR "MMP?9 Metalloproteinase" OR "92?kDa Gelatinase" OR "Gelatinase B" OR "S100A12 protein, human" OR "S100A12 Protein" OR "S100 A12 Protein" OR "MRP?6 Protein" OR "Calgranulin C Protein" OR "EN?RAGE Protein" OR "CAAF1 Protein" OR "rectal nitric oxide" OR "Osteoprotegerin" OR Osteoclastogenesis OR "Follicular Dendritic Cell?Derived Receptor?1" OR "Tumor Necrosis Factor Receptor Superfamily" OR "FDCR?1 Protein" OR "OCIF Protein" OR "Tumor Necrosis Factor Receptor 11b"

**Embase result: 24**

TS= ("Digestive System" OR "Alimentary System" OR intestine\*) AND TS= ("Cystic Fibrosis" OR "Fibrosis Cystic" OR CF or mucoviscidosis OR "Fibrocystic Disease\*") AND TS= ("Leukocyte L1 Antigen Complex" OR calprotectin OR calgranulin OR "Pyruvate Kinase" OR "MAP Kinase Kinase Kinase 2" OR "Pyruvate?Kinase" OR "MAP?Kinase" OR "DEFB126 protein" OR "hBD?2 protein" OR "DEFB4A protein" OR "beta defensin" OR "hBD?2 antibacterial peptide" OR "Matrix Metalloproteinase 9" OR "Matrix Metalloproteinase?9" OR "92?kDa Type IV Collagenase" OR "MMP?9 Metalloproteinase" OR "92?kDa Gelatinase" OR "Gelatinase B" OR "Matrix Metalloproteinase 9" OR "Matrix Metalloproteinase?9" OR "92?kDa Type IV Collagenase" OR "MMP?9 Metalloproteinase" OR "92?kDa Gelatinase" OR "Gelatinase B" OR "S100A12 protein" OR "MRP?6 Protein" OR "Calgranulin C Protein" OR "EN?RAGE Protein" OR "CAAF1 Protein" OR "rectal nitric oxide" OR "Osteoprotegerin" OR "Osteoclastogenesis" OR "Follicular Dendritic Cell?Derived Receptor?1" OR Tumor Necrosis Factor Receptor Superfamily OR "FDCR?1 Protein" OR "OCIF Protein" OR "Tumor Necrosis Factor Receptor 11b")

**Web of Sciences results: 20**

(TITLE-ABS-KEY ("Digestive System" OR "Alimentary System" OR intestine\*)) AND (TITLE-ABS-KEY ("Cystic Fibrosis" OR "Fibrosis Cystic" OR cf OR mucoviscidosis OR "Fibrocystic Disease\*")) AND ((TITLE-ABS-KEY ("Leukocyte L1 Antigen Complex" OR calprotectin OR calgranulin OR "Pyruvate Kinase" OR "MAP Kinase Kinase Kinase 2" OR "Pyruvate?Kinase" OR "MAP?Kinase" OR "DEFB126 protein" OR "hBD?2 protein" OR "DEFB4A protein" OR "beta defensin") OR TITLE-ABS-KEY ("hBD? 2 antibacterial peptide" OR "Matrix Metalloproteinase 9" OR "Matrix Metalloproteinase?9" OR "92?kDa Type IV Collagenase" OR "MMP? 9 Metalloproteinase" OR "92?kDa Gelatinase" OR "Gelatinase B" OR "Matrix Metalloproteinase 9") OR TITLE-ABS-KEY ("Matrix Metalloproteinase?9" OR "92?kDa Type IV Collagenase" OR "MMP?9 Metalloproteinase" OR "MMP?9 Metalloproteinase" OR "92?kDa Gelatinase" OR "Gelatinase B" OR "S100A12 protein" OR "MRP?6 Protein" OR "Calgranulin C Protein" OR "EN?RAGE Protein") OR TITLE-ABS-KEY ("CAAF1 Protein" OR "rectal nitric oxide" OR "Osteoprotegerin" OR "Osteoclastogenesis" OR "Follicular Dendritic Cell?Derived Receptor?1" OR tumor AND necro sis AND factor AND receptor AND superfamily OR "FDCR?1 Protein" OR "OCIF Protein") OR TITLE-ABS-KEY ("Tumor Necrosis Factor Receptor 11b"))

**Scopus results: 65**