

Product Review

Raw Materials for Immunoassay Development and Manufacturing

Antibodies

Monoclonal Antibodies

Specificity	Availability
Albumin	4 Clones
C-Reactive Protein	1 Clone
Carcinoembryonic Antigen (CEA)	1 Clone
Cathepsin D	2 Clones
Human Chorionic Gonadotropin (hCG)	1 Clone
α-hCG	1 Clone
β-hCG	2 Clones
Creatine Kinase BB (CK-BB)	1 Clone
Creatine Kinase MB (CK-MB)	2 Clones
Creatine Kinase MM (CK-MM)	1 Clone
Ferritin	2 Clones
α-Fetoprotein (AFP)	1 Clone
β-hFSH	1 Clone
Hepatitis B Surface Antigen	3 Clones
Immunoglobulin E (IgE)	2 Clones
β-hLH	2 Clones
β2-Microglobulin	1 Clone
Myoglobin	1 Clone
Prolactin	3 Clones
PSA & PSA/ACT	6 Clones
β-hTSH	4 Clones

Goat Polyclonal Antibodies (Purified)

Specificity	Catalog No.
Albumin	GA029
C-Reactive Protein	GC019
Human Chorionic Gonadotropin (hCG)	GC079
α-hCG	GC089
β-hCG	GC099
Creatine Kinase MM (CK-MM)	GC139
Ferritin	GF039, GF035
Myoglobin	GM079, GM079
Prolactin	GP159
PSA	GP079, GP075

IMMUNOASSAY DESIGN

Immunoassays are often designed around the limitations of the selected antibodies. For example, many commercially available pregnancy assays require the addition of an antibody to another hormone (LH), to minimize cross-reactivity due to limitations of the hCG antibody repair. In addition, lot-to-lot variability of the antibody preparations can complicate the assay manufacturing process, requiring time-consuming prequalification testing or procedural adjustments during the manufacturing process.

As a primary manufacturer of purified antigens, monoclonal and polyclonal antibodies, and a lateral flow assay, Scripps Laboratories recognizes the importance of antigen quality in the initial production and screening of monoclonal and polyclonal antibodies. In addition, appropriate purification methods must be developed to ensure reproducible antibody characteristics for use in the manufacture of an immunoassay. The design process that led to the development of the hCG One-Step pregnancy test provides Scripps a unique understanding of the critical components and processing steps necessary to consistently manufacture a reproducible assay.