

Product Review

Raw Materials for Immunoassay Development and Manufacturing

Myoglobin

Purified Myoglobin

Catalog No.	Source	Purity
M0725	Human Heart	≥99%
M0724	Human Heart	≥95%
M0224	Human Skeletal Muscle	≥95%

Myoglobin Monoclonals

Catalog No.	Clone No.	Subclass	Reactivity Notes
MM077	BM002S	IgG ₁	No cross-reactivity with human hemoglobin in direct ELISA

Myoglobin Polyclonals

Catalog No.	Host Animal	Purification Method
GM079	Goat	Immunoaffinity chromatography
GM075	Goat	Ion-exchange chromatography

*All polyclonals exhibit <1% cross-reactivity with hemoglobin and show no visible reaction on IEP vs concentrated, pooled human serum.

Antibody Pairs for Immunoassay Development

The following myoglobin antibodies are recommended for the development of an immunoassay specific for myoglobin:

Capture Antibody	Trapping Antibody
Polyclonal GM079 or GM075	Monoclonal BM002S

PURIFIED MYOGLOBULIN

Myoglobin is one of the earliest serum markers available for the diagnosis of myocardial infarction (MI). It often elevates within 1-2 hours after the infarct, while CK-MB may require 4-6 hours before reaching abnormal levels. Serum myoglobin levels are often used to rule-out MI, as negative myoglobin results are highly predictive of a non-muscular injury.

Scripps Laboratories has single band myoglobin available, as well as >95% pure material, if purity is not a limiting criterion. Scripps myoglobin is stable, and the lot-to-lot consistency is excellent.

MYOGLOBULIN ANTIBODIES

Several years in development, bulk quantities of myoglobin monoclonal and polyclonal antibodies are available for the development of a myoglobin immunoassay. These projects are mature and producing large volumes of antibody.

The myoglobin monoclonal is protein A purified, and the polyclonals are available purified via immunoaffinity or ion-exchange chromatography.