

Human Hemoglobin Monoclonal Antibodies

ORDERING INFORMATION

Catalog No.	Clone No.	MAb Subtype	Size	Library Pack No.	100ug/clone
19001	HB11-201.11	IgG1	100ug, 500ug	190101	All 3 clones
19002	HB11-203.1	IgG1	100ug, 500ug		
19003	HB11-231.2	IgG1	100ug, 500ug		

Format: Protein G-purified antibody in PBS, pH 7.4.

BACKGROUND

Hemoglobin is the iron-containing oxygen-transport metalloprotein in red blood cells of all vertebrates as well as in the tissues of some invertebrates. In mammals, hemoglobin makes up about 35% of the total content of red blood cells. It has an oxygen-binding capacity of 1.34 mL O₂ per gram, which increases the total blood oxygen capacity seventy-fold compared to dissolved oxygen in blood. The mammalian hemoglobin molecule can bind up to four oxygen molecules. Hemoglobin also carries some of the body's respiratory carbon dioxide (about 20–25% of the total) as carbaminohemoglobin as well as nitric oxide bound to a thiol group, releasing it at the same time as oxygen. Other cells that contain hemoglobin include the A9 dopaminergic neurons in the substantia nigra, macrophages, alveolar cells, and mesangial cells in the kidney. In these tissues, hemoglobin has a non-oxygen-carrying function as an antioxidant and a regulator of iron metabolism.

SPECIFICATION SUMMARY

Antigen: Purified human hemoglobin.

Host Species: Mouse

Specificity: These antibodies recognize human hemoglobin. They do not cross-react with hemoglobin of the following species: bovine, chicken, equine, ovine, or porcine.

APPLICATIONS

These antibodies have been qualified for use in ELISA to detect human hemoglobin.

DILUTION INSTRUCTIONS

Dilute in PBS or medium that is identical to that used in the assay system.

STORAGE AND STABILITY

These antibodies are stable for at least one (1) year at -20°C to -70°C. Store product in appropriate aliquots to avoid multiple freeze-thaw cycles.