



Hemoglobin Colorimetric Detection kit (2 plate)

Cat #	K3013-1
Size	192 rxns

The Hemoglobin Detection kit uses a single reaction solution that is stable at 4°C, not light sensitive and does not contain dangerous chemicals. All forms of hemoglobin are rapidly converted to a single stable form that is measured spectrophotometrically at 560 nm. A human hemoglobin standard is provided to generate a standard curve for the assay. Hemoglobin (Hb) is an erythrocyte protein complex comprised of two sets of identical pairs of subunits, each of which bind an iron-prophyrin group commonly called heme. Generally containing two alpha or alpha-like globulin chains, the remaining subunits may be beta, gamma, delta or epsilon, or in the case of infants, fetal hemoglobin that is replaced during the first year of life. Heme binds and releases oxygen or carbon dioxide in response to slight changes in local gas tension. Free oxygen or carbon dioxide bound by one heme group facilitates subsequent binding by the other heme groups in a given hemoglobin molecule. Subtle changes in pH also regulate hemoglobin affinity for free gases, resulting in a high level of hemostatic control. Hemoglobin values are associated with a variety of conditions ranging from anemias (low Hb), erythrocytosis (high Hb), thalassemias (aberrant chain synthesis), and sickling disorders (abnormal complex shape). Whole blood, serum, and EDTA and heparin plasma samples have been validated with this assay.