



Rabbit Anti-Human HBG1/HBG2 monoclonal antibody, clone KN95-21 (CABT-L923)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Target	Hemoglobin subunit gamma 1and2
Immunogen	Recombinant protein
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Clone	KN95-21
Purification	Protein A purified.
Conjugate	Unconjugated
Applications	WB, ICC/IF, IHC
Cellular Localization	Cytosol, hemoglobin complex.
Positive Control	D3, MCF-7, PC-12, human placenta cells lysates.
Format	Liquid
Size	100 µl
Buffer	1×TBS (pH7.4), 1% BSA, 40% Glycerol.
Preservative	0.05% Sodium Azide
Storage	Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw

BACKGROUND

Introduction

Hemoglobin (Hgb) is coupled to four iron-binding, methene-linked tetrapyrrole rings (heme). The α and β globin loci determine the basic hemoglobin structure. The globin portion of hemoglobin consists of two α chains and two β chains arranged in pairs forming a tetramer. Each of the four globin chains covalently associates with a heme group. The bonds between α and β chains are weaker than between similar globin chains, thereby forming a cleavage plane that is important for oxygen binding and release. High affinity for oxygen occurs upon relaxation of the $\alpha 1$ - $\beta 2$ cleavage plane. When the two $\alpha 1$ - $\beta 2$ interfaces are closely bound, hemoglobin has a low affinity for oxygen. Hb A, which contains two α chains plus two β chains, comprises 97% of total circulating hemoglobin. The remaining 3% of total circulating hemoglobin is comprised of Hb A-2, which consists of two α chains plus two δ chains, and fetal hemoglobin (Hb F), which consists of two α chains together with two γ chains.
