

**NPA190Hu01 100µg**  
**Native Glycated Hemoglobin (HbA1C)**  
**Organism Species: Homo sapiens (Human)**  
*Instruction manual*

FOR IN VITRO USE AND RESEARCH USE ONLY  
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

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9th Edition (Revised in Jul, 2013)

## **[ PROPERTIES ]**

**Host:** Native

**Source:** Human

**Purity:** >90%

**Endotoxin Level:** <1.0EU per 1µg (determined by the LAL method).

**Formulation:** Supplied as lyophilized form in 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% sarcosyl, 5% trehalose, and preservative.

**Applications:** SDS-PAGE; WB; ELISA; IP.

(May be suitable for use in other assays to be determined by the end user.)

## **[ RELEVANCE ]**

The HbA1c shows the average amount of glucose in the blood over a period of 3 months. Sugar in the bloodstream can become attached to the hemoglobin in red blood cells (glycosylation). Once the sugar is attached, it stays there for the life of the red blood cell, which is about 120 days. The higher the level of blood sugar, the more sugar attaches to red blood cells. The HbA1c is formed in a non-enzymatic pathway by hemoglobin's standard exposure to elevated plasma levels of glucose. HbA1c is tested to monitor nephropathy and retinopathy in diabetes mellitus.

## **[ USAGE ]**

Reconstitute in sterile ddH<sub>2</sub>O.

## **[ STORAGE AND STABILITY ]**

**Storage: Avoid repeated freeze/thaw cycles.**

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

**Stability Test:** The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition.

## **[ REFERENCES ]**

1. Larsen ML., *et al.* (1990) N. Engl. J. Med. 323 (15): 1021–5.
2. Huisman TH., *et al.* (1958) J. Lab. Clin. Med. 52 (2): 312–27.
3. Bookchin RM., Gallop PM., (1968) Biochem. Biophys. Res. Commun. 32 (1): 86–93.
4. Rahbar S., *et al.* (1969) Biochem. Biophys. Res. Commun. 36 (5): 838–43.