

NPB409Ca91 10µg Recombinant Hemoglobin (HB) Organism Species: Canis familiaris; Canine (Dog) *Instruction manual* 

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

9th Edition (Revised in Jul, 2013)

#### [PROPERTIES]

Host: Native Source: Canine Erythrocytes Purity: >90% Concentration: 200µg/mL Endotoxin Level: <1.0EU per 1µg (determined by the LAL method). Formulation: Supplied as solution form in 0.01M PBS, 50% glycerol. Applications: SDS-PAGE; WB; ELISA; IP. (May be suitable for use in other assays to be determined by the end user.)

# [RELEVANCE]

Hemoglobin is the iron-containing oxygen-transport metalloprotein in the red blood cells of all vertebrates as well as the tissues of some invertebrates. Hemoglobin in the blood carries oxygen from the respiratory organs (lungs or gills) to the rest of the body where it releases the oxygen to burn nutrients to provide energy to power the functions of the organism, and collects the resultant carbon dioxide to bring it back to the respiratory organs to be dispensed from the organism.

# [ <u>USAGE</u> ]

Reconstitute in sterile PBS, pH7.2-pH7.4.

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### [ 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.

### [<u>REFERENCES</u>]

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- 3. Brimhall B., et al. (1977) J. Mol. Evol. 9:231-235.
- Yamamoto M, *et al.* (2012) Artif Cells Blood Substit Immobil Biotechnol. 40(1-2):179-95.