

NPA518Eq01 100µg Native Ferritin (FE) Organism Species: Equus caballus; Equine (Horse) 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: Horse Purity: >90% Endotoxin Level: <1.0EU per 1µg (determined by the LAL method). Formulation: Supplied as lyophilized form in 50mM TRIS, 200mM NaCl Applications: SDS-PAGE; WB; ELISA; IP.

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

[RELEVANCE]

Ferritin is a ubiquitous intracellular protein that stores iron and releases it in a controlled fashion. The amount of ferritin stored reflects the amount of iron stored. The protein is produced by almost all living organisms. Ferritin is a protein of 450 kDa consisting of 24 subunits that is present in every cell type. Ferritin genes are highly conserved between species. All vertebrate ferritin genes have three introns and four exons. Ferritin serves to store iron in a non-toxic form, to deposit it in a safe form, and to transport it to areas where it is required.

[<u>USAGE</u>]

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

[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. Granier T., et al. (2003) J. Biol. Inorg. Chem. 8 (1-2): 105-11.
- 2. Theil, E. (1987) Annual review of biochemistry 56 (1): 289-315.
- 3. Andrews, S. C., et al. (1992) Journal of Inorganic Biochemistry 47 (3-4): 161-174.
- 4. Zhang, Y., *et al.* (2003) Comparative Biochemistry and Physiology Part B: Biochemistry and Molecular Biology 135: 43.