Technical Bulletin

Anti-Horse IgG (Fc specific)-Peroxidase antibody

Produced in rabbit, affinity isolated antibody, lyophilized powder

SAB3700152

Product Description

Anti-Horse IgG F(c) is developed in rabbit is a proteolytic fragment of immunoglobulin G (IgG) obtained by limited digestion with the enzyme papain under controlled conditions of temperature, time, and pH. Receptors bind the Fc portion of horse IgG and often this fragment is removed from immunoglobulins to minimize receptor binding and lower background reactivity.

The immunoglobulin IgG from horse comprises six subtypes. The subtypes share high sequence homology. Immunoglobulin super-family have a common structure, comprising two heavy (H) chains and two light (L) chains, held together by disulfide linkages. The heavy chain has one variable N-terminal region and three to four constant (CH1-CH4) C-terminal regions. The L chain comprises of one variable N-terminal region and a constant C-terminal region.

Immunoglobulin IgG digestion by papain results in the generation of fragment antigen binding (Fab). Pepsin digestion of IgG generates fragment crystallisable (Fc). The Fc region of IgG antibody has enormous therapeutic potential and is exploited for the development of therapeutic antibodies. Normal serum IgG levels (400-800 mg/dL) along with total serum proteins and serum globulin is essential in foals to alleviate the risk of developing failure of transfer of passive immunity (FTPI).

Application

This product has been assayed against 1.0 ug of Horse IgG in a standard capture ELISA using ABTS (2-2’–azino-bis-[3-ethylbenthiazoline-6-sulfonic acid]) code no. ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:20000 to 1:200000 of the reconstitution concentration is suggested for this product.

Reagent

Supplied in 0.02 M Potassium Phosphate, 0.15 M Sodium chloride, pH 7.2 with 10 mg/mL Bovine Serum Albumin (BSA)-Immunoglobulin and Protease free.

Product Profile

Immunoblotting:
1:1000 – 1:10000

Elisa:
1:1000 – 1:50000

Immunohistochemistry:
1:500 – 1:2500

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing is not recommended. Storage in “frost-free” freezers is also not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

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