

Product datasheet for **AM00683PU-N**

Bovine Corona Virus E2 protein Mouse Monoclonal Antibody [Clone ID: 5A4]

Product data:

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|-----------------------|---|
| Product Type: | Primary Antibodies |
| Clone Name: | 5A4 |
| Applications: | ELISA |
| Recommended Dilution: | ELISA. HIT (hemagglutination inhibition titer). |
| Reactivity: | Bovine Coronavirus |
| Host: | Mouse |
| Isotype: | IgG1 |
| Clonality: | Monoclonal |
| Immunogen: | Bovine corona virus. Hybridization of Sp2/0 myeloma cells with spleen cells from Balb/c mice. |
| Specificity: | Recognizes bovine corona virus surface antigen (peplomer). |
| Formulation: | PBS, pH 7.4 containing 0.09% Sodium azide State: Purified State: Liquid purified IgG |
| Concentration: | lot specific |
| Purification: | >95% pure (SDS-PAGE). Protein G chromatography |
| Conjugation: | Unconjugated |
| Storage: | Store the antibody undiluted at 2-8°C. DO NOT FREEZE! |
| Stability: | Shelf life: one year from despatch. |
| Database Link: | P25193 |



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Background:

Bovine Corona Virus Spike glycoprotein is cleaved into S1 and S2 Spike proteins. The precursor is processed into S1 and S2 by host cell furin or furin-like protease to yield the mature S1 and S2 proteins. The cleavage site between S1 and S2 requires the optimal sequence [KR]-X-[KR]-R.

S1 attaches the virion to the cell membrane by binding to 9-O-acetylated sialic acid containing proteins, initiating the infection.

S2 is a class I viral fusion protein. Under the current model, the protein has at least 3 conformational states: pre-fusion native state, pre-hairpin intermediate state, and post-fusion hairpin state. During viral and target cell membrane fusion, the coiled coil regions (heptad repeats) assume a trimer-of-hairpins structure, positioning the fusion peptide in close proximity to the C-terminal region of the ectodomain. The formation of this structure appears to drive apposition and subsequent fusion of viral and target cell membranes.

Synonyms:

Spike glycoprotein, S glycoprotein, Peplomer protein, E2 protein

Note:

Centrifuge before opening to ensure complete recovery of vial contents.