

## Product datasheet for **AM00683PU-N**

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

#### **Product data:**

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:	<u><a href="#">P25193</a></u>



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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.