

AM00683PU-N**Monoclonal Antibody to Bovine Corona Virus E2 protein - Purified**

Alternate names:	E2 protein, Peplomer protein, S glycoprotein, Spike glycoprotein
Quantity:	1 mg
Concentration:	3.4 mg/ml (OD280nm E0.1%=1.4)
Background:	<p>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.</p> <p>S1 attaches the virion to the cell membrane by binding to 9-O-acetylated sialic acid containing proteins, initiating the infection.</p> <p>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.</p>
Uniprot ID:	P25193
NCBI:	11133
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	AM03095PU-N
Clone:	5A4
Immunogen:	Bovine corona virus. Hybridization of Sp2/0 myeloma cells with spleen cells from Balb/c mice.
Format:	State: Liquid purified IgG Purification: >95% pure (SDS-PAGE). Protein G chromatography Buffer System: PBS, pH 7.4 containing 0.09% Sodium azide
Applications:	ELISA. HIT (hemagglutination inhibition titer). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	Recognizes bovine corona virus surface antigen (peplomer).
Add. Information:	Centrifuge before opening to ensure complete recovery of vial contents.

Storage: Store the antibody undiluted at 2-8°C.
DO NOT FREEZE!
Shelf life: one year from despatch.

General Readings: "Primary structure of the S peplomer gene of bovine coronavirus and surface expression in insect cells." Parker M.D., Yoo D., Cox G.J., Babiuk L.A. J. Gen. Virol. 71:263-270(1990)