PLP2 Antibody (Papain-like Protease 2)
Cat. # AB603

Background

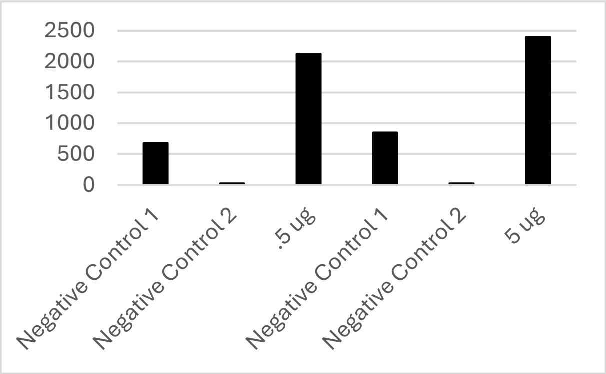
Five human coronaviruses (CoVs) have been identified to date, including NL63, a common respiratory pathogen associated with both upper and lower respiratory tract illnesses such as bronchiolitis and croup. Epidemiological studies have demonstrated the prevalence of NL63 infections, with detection rates ranging from 0.3% to 10% in clinical specimens collected from both adults and infants presenting with respiratory diseases. The NL63 genome encodes two papain-like proteases, PLP1 and PLP2. PLP2 functions as a dual specificity isopeptidase, exhibiting both deubiquitylating and deISGylating activities. It cleaves Ub-PLA2 with high efficiency and ISG15-PLA2 with moderate efficiency.

Application(s)

ELISA, Western Blot. Robust detection of 100ng of recombinant protein was possible when antibody was used at a final concentration of 5 µg/ml.

Purity	≥ 90% estimated by SDS-PAGE
Quantity	250 µg
Molecular Weight	36.7KDa
Physical State	Liquid. Supplied in phosphate buffered saline pH 7.4.
Source & Clonality	Chicken. Polyclonal antibody to PLP2.
Species Cross Reactivity	NL63 Coronavirus
Immunogen	Full-length PLP2
Isotype	IgY
Stability & Storage	Over 1 year at -20° C or below. Avoid repeated freeze/thaw cycles

Product QC



Analysis of PLP2 using ELISA plate. 0.5 or 5 µg of PLP2 was detected by 1.49 µg/mL of AB603 using traditional ELISA detection reagent. 2º Antibody: α-Chicken HRP (1:5000). Negative Control 1: No AB501; Negative Control 2: no detection reagent. AB501.

References

1. Chen, Z., et al., J Virol, 2007; m81(11) :p.6007-18.
2. Loch CM., et al., Mol Cell Proteomics, 2011;10(1):M110.002402.