

**SARS-CoV-2 (2019-nCoV) Spike HEK293 Cell Lysate (WB positive control)**

Catalog_no :	AD-PD400125
Applications :	Western Blot (WB) Optimal dilutions/concentrations should be determined by the end user.
Category :	冠状病毒产品
Size :	300µg
Source :	Human Cells
Storage_stability :	Store at 4°C for up to twelve months from date of receipt. After re-dissolution, aliquot and store at -80°C for up to twelve months. Avoid repeated freeze-thaw cycles.
Molecular Weight :	The recombinant receptor binding domain (RBD) of 2019-nCoV spike consists of 457 amino acids and predicts a molecular mass of 51.5 kDa.
Background :	The spike (S) glycoprotein of coronaviruses contains protrusions that will only bind to certain receptors on the host cell. Known receptors bind S1 are ACE2, angiotensin-converting enzyme 2; DPP4, dipeptidyl peptidase-4; APN, aminopeptidase N; CEACAM, carcinoembryonic antigen-related cell adhesion molecule 1; Sia, sialic acid; O-ac Sia, O-acetylated sialic acid. The spike is essential for both host specificity and viral infectivity. The term 'peplomer' is typically used to refer to a grouping of heterologous proteins on the virus surface that function together. The spike (S) glycoprotein of coronaviruses is known to be essential in the binding of the virus to the host cell at the advent of the infection process. It's been reported that 2019-nCoV can infect the human respiratory epithelial cells through interaction with the human ACE2 receptor. The spike protein is a large type I transmembrane protein containing two subunits, S1 and S2. S1 mainly contains a receptor binding domain (RBD), which is responsible for recognizing the cell surface receptor. S2 contains basic elements needed for the membrane fusion. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity. The main functions for the Spike protein are summarized as: Mediate receptor binding and membrane fusion; Defines the range of the hosts and specificity of the virus; Main component to bind with the neutralizing antibody; Key target for vaccine design; Can be transmitted between different hosts through gene recombination or mutation of the receptor binding domain (RBD), leading to a higher mortality rate.
缓冲液 :	1 X Sample Buffer (1 X modified RIPA buffer+1 X SDS loading buffer).
注意事项 :	1. Centrifuge the tube for a few seconds and ensure the pellet at the bottom of the tube. 2. Re-dissolve the pellet using 200µL pure water and boil for 2-5 min. 3. Store the lyophilized cell lysate at 4°C. After re-dissolution, recommend to aliquot it into smaller quantities and store at -80°C.
classification_1 :	2019-nCoV coronavirus spike Overexpression Lysate; 2019-nCoV cov spike Overexpression Lysate; 2019-nCoV nCoV RBD Overexpression Lysate; 2019-nCoV nCoV s1 Overexpression Lysate; 2019-nCoV nCoV s2 Overexpression Lysate; 2019-nCoV nCoV spike Overexpress
reference :	1. Shen S, et al. (2007) Expression, glycosylation, and modification of the spike (S)

glycoprotein of SARS CoV. Methods Mol Biol. 379: 127-35. 2. Du L, et al. (2009) The spike protein of SARS-CoV--a target for vaccine and therapeutic development. Na

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裂解缓冲液：

Modified RIPA Lysis Buffer: 50 mM Tris-HCl pH 7.4, 150 mM NaCl, 1mM EDTA, 1% Triton X-100, 0.1% SDS, 1% Sodium deoxycholate, 1mM PMSF.

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