

(仅供科研使用,不得用于临床诊断!)

猪呼肠孤病毒抗体(RV-Ab)ELISA 试剂盒使用说明书产品货号: BY-EP780109 规格: 48T/96T

使用前请仔细阅读说明书。如果有任何问题,请通过以下方式联系我们: 官方热线: 025-5229-8998 销售部电话: 13914481711 技术电话: 15950492658 联系邮箱: 3224949330@qq.com 公司网址: www.byabscience.cn 具体保质期请见试剂盒外包装标签。请在保质期内使用试剂盒。

网址: www.byabscience.cn 官方热线: 025-5229-8998 监督电话: 15950492658

试剂盒性能 物理性能:各液体组分澄清透明、无沉淀或者絮状物。微孔板铝箔袋应真空包装,

无破损漏气。

阴性对照 OD 值: 小于 0.2。

阳性对照 OD 值: 大于 0.8。

精密度: 批内变异系数 CV%小于 10%; 批间变异系数 CV%小于 15%。

回收率:回收率在85%-115%之间。

特异性: 本试剂盒识别天然和重组猪呼肠孤病毒抗体(RV-Ab), 与结构类似物无交叉。

稳定性: 2℃-8℃保存,有效期6个月。

用途:用于定性检测血清、血浆、细胞培养上清液和组织等样本中是否含有猪呼肠孤病毒抗体 (RV-Ab)。

保质期: 2℃-8℃保存,有效期6个月。

### 实验原理

试剂盒采用间接法酶联免疫吸附试验(ELISA)。往预先包被猪呼肠孤病毒抗体(RV-Ab)捕获抗原的包被微孔中,依次加入标本、阴性和阳性对照,再加入 HRP 标记的检测抗体,经过温育并彻底洗涤。用底物 TMB 显色,TMB 在过氧化物酶的催化下转化成蓝色,并在酸的作用下转化成最终的黄色。颜色的深浅和样品中的猪呼肠孤病毒抗体(RV-Ab)呈正相关。用酶标仪在450nm 波长下测定吸光度(OD 值),判定阴阳性。

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Kit components and storage: Store unopened kits at 2-8

degrees Celsius. Do not use expired kits.

Components	48-well configuration	96-well configuration	Store after opening
Pre-coated enzyme	48T	96T	2-8°C14 days
negative control	0.3mL	0.3mL	2-8°C14 days
positive control	0.3mL	0.3mL	2-8°C14 days
sample diluent	3ml	6ml	2-8°C180 days
HRP labeled antibodies	5ml	10ml	2-8°C14 days
Chromogenic substrate	3ml	6ml	2-8°C180 days
Chromogenic substrate	3ml	6ml	2-8°C180 days
stop solution	3ml	6ml	2-8°C180 days
20×Lotion	15ml	25ml	2-8°C180 days
sealing film	2 sheets	2 sheets	
manual	1 serving	1 serving	
Ziplock bag	1	1	

Note: 1: Please check whether the label and quantity of the reagents in the kit are consistent with the table before use.

2: If the components of the kit need to be used again, please ensure that they have not been contaminated since the last use. 3: If the enzyme plate is not used up in a single time, remember to seal it and store it at 2-8°C.

#### Prepare your own test equipment required for the test (not provided, but can assist in

1) Microplate reader capable of detecting absorbance at 450 nm 2) Pipette, pipette tip, and sample addition tank 3) 37°C incubator or water bath 4) Test tubes, centrifuge tubes, measuring cylinders, etc. for preparing reagents 5) Distilled water or deionized water Ionized water 6) Vortex oscillator, microplate oscillator



#### Notes 1) For scientific research use only,

not for clinical diagnosis.

- 2) Use within the validity period marked on the kit. Expired products must not be used.
- 3) Do not mix with kits or components from other manufacturers. Use the sample diluent provided with the kit.
- 4) If the sample value is higher than the highest standard concentration value, please dilute the sample appropriately and then re-measure.
- 5) Human anti-mouse and other heterophilic antibodies present in the sample to be tested will interfere with the test results. Please eliminate this factor before testing.
- 6) The test results obtained by other methods are not directly comparable to the test results of this kit.
- 7) Please wear a lab coat and latex gloves for protection during the test. Especially when testing blood or other body fluid samples, please follow the national biological laboratory safety protection regulations.
- 8) Carry out incubation strictly according to the specified time and temperature to ensure accurate results. All reagents must reach room temperature 20-25°C before use. Store reagents refrigerated immediately after use.
- 9) 洗板不正确可以导致不准确的结果。在加入底物前确保尽量吸干孔内液体。温育过程中不要让微孔干燥掉。
- 10) 消除板底残留的液体和手指印, 否则影响 OD 值。
- 11)底物显色液应呈无色或很浅的颜色。
- 12) 避免试剂和标本的交叉污染以免造成错误结果。
- 13) 在储存和温育时避免强光直接照射。
- 14) 检测使用的酶标仪需要安装能检测 450±10nm 波长的滤光片,光密度范围在 0-
- 3.5 之间。建议使用时提前 15 分钟预热。

15) 试验中所用的 EP 管和吸头均为一次性使用,严禁混用。

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### 样品的准备和保存

以下只是列出样品采集和保存的一般指南。所有样本采集保存过程中,不得使用叠氮钠做为防腐剂。样品如果不立即分析,应分装后冷冻保存,且避免反复冻融。

细胞培养上清——离心去除沉淀,立即分析或分装后-20℃冷冻保存。

血清——用干净试管收集血液,室温凝固 30 分钟,离心 2000×g 20 分钟,收集血清。立即 分析或分装后-20℃冷冻保存。

血浆——采用肝素、柠檬酸盐或 EDTA 抗凝,抽血后 30 分钟内在 2-8℃离心 2000×g 20 分钟。为消除血小板的影响,建议在 2-8℃进一步离心 10000×g 10 分钟。立即分析或分装后-20℃冷冻保存。

细胞裂解液——对于贴壁细胞,去除培养液,用 PBS、生理盐水或无血清培养液洗一遍。加入适量裂解液,用枪吹打数下,使裂解液和细胞充分接触。通常 10 秒后,细胞就会被裂解。对于悬浮细胞,离心收集细胞,用 PBS、生理盐水或无血清培养液洗一遍。加入适量裂解液,用枪吹打把细胞吹散,用手指轻弹以充分裂解细胞。充分裂解后,10000—14000×g 离心 3-5 分钟,取上清。立即分析或分装后-20℃冷冻保存。

Tissue homogenate - rinse the tissue with pre-cooled PBS (0.01M, pH=7.4) to remove residual blood (lysed red blood cells in the homogenate will affect the measurement results), weigh and cut the tissue into pieces. Mix the minced tissue with the corresponding volume of PBS (generally at a weight-to-volume ratio of 1:9, for example, 1g of tissue sample corresponds to 9mL of PBS. The specific volume can be adjusted appropriately according to experimental needs and recorded. It is recommended to add Protease inhibitor) was added to a glass homogenizer and ground thoroughly on ice. In order to further lyse tissue cells, the homogenate can be sonicated or repeatedly frozen and thawed. Finally, centrifuge the homogenate at 5000 × g for 5 to 10 minutes, and take the supernatant for detection.

Urine - Collect in sterile tubes and centrifuge at 2000×g for 20 minutes. Carefully collect the supernatant. If a precipitate forms, centrifuge again.



Reagent preparation 1. Before use, all components must be rewarmed for at least 60 minutes to ensure sufficient rewarming to room temperature.

2. Concentrated washing liquid: The concentrated washing liquid taken out from the refrigerator will produce crystals. This is a normal phenomenon. Heating in a water bath will completely dissolve the crystals. Concentrated detergent and distilled water, dilute 1:20, that is, 1 part of concentrated detergent, add 19 parts of distilled water.

Operating procedures: Return all reagents and components to room temperature first. It is recommended to do duplicate holes for standards, quality control materials and samples.

- 1. Prepare the working solution of various components of the kit according to the method described in the previous instructions.
- 2. Take out the required slats from the aluminum foil bag, seal the remaining slats in a ziplock bag and return it to the refrigerator.
- 3. Set up standard wells and sample wells, and add 50  $\mu$ L of standards of different concentrations to each standard well;
- 4. Add 50 μL of the sample to be tested into the sample well; do not add it to the blank well.
- 5. Except for the blank well, add 100  $\mu$ L of horseradish peroxidase (HRP)-labeled detection antibody to each well of the standard well and sample well, seal the reaction well with a sealing film, and keep the temperature at 37°C in a water bath or thermostatic oven. Incubate for 60 minutes.
- 6. Discard the liquid, pat dry on absorbent paper, fill each well with washing solution (350  $\mu$ L), let it stand for 1 minute, shake off the washing solution, pat dry on absorbent paper, and repeat washing the plate 5 times (you can also use a plate washer to wash it) plate).

- 7. Add 50 µL each of substrates A and B to each well, and incubate at 37°C in the dark for 15 minutes.
- 8. Add 50  $\mu L$  of stop solution to each well, and within 15 minutes, measure the OD value of each well at a wavelength of 450 nm.

### [Interpretation of test results]

- 1. Negative control OD value: less than 0.2.
- 2. Positive control OD value: greater than 0.8.
- 3. Positive judgment (Cut-Off value): If the negative control OD value is +0.25, and the sample OD value is greater than the threshold, it is judged as positive, otherwise, it is negative.

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[Problem Analysis] If the experimental results are not good, please take pictures of the color development results in time, save the experimental data, keep the used strips and unused reagents, and then contact our company's technical support to solve the problem for you. At the same time, you can also refer to the following information: [Questions and Answers]

Problem description	Possible reasons	Corresponding countermeasures Corresponding countermeasures
	Incorrect liquid aspiration or	Check pipettes and tips
standard curve gradient difference	Equilibration time is too short	Ensure sufficient balancing time
	Incomplete washing	Ensure the washing time and number of washings and the amount of liquid
	Incubation time too short	Ensure adequate incubation time
	The experimental temperature is incorrect	Use recommended experimental temperatures
Very weak or colorless	Insufficient reagent volume or missing addition	Check the liquid aspirating and
	Incorrect dilution	adding process to ensure that all reagents are added in order and in
	Enzyme label inactivation or substrate failure	Mix enzyme conjugate and substrate and check by rapid color development
D 1: 1 : 1		Check the wavelength and filter
Reading value is low	Microplate reader settings are incorrect	Turn on the microplate reader and preheat it in advance
Large coefficient of variation	Adding fluid incorrectly	Check the filling situation
	The working concentration of the	Use the recommended dilution
High background value	Incomplete washing of enzyme plate	Ensure that each step of cleaning is complete; if using an automatic plate washer, please check whether all outlets are blocked;
	The lotion is contaminated	Prepare fresh lotion
Low sensitivity	Improper storage of ELISA kits	Store relevant reagents according to
, and the second	Not terminated before reading	Stop solution should be added to



#### <u>stat</u>ement

- Due to the current conditions and scientific and technological level, it is not
  possible to conduct comprehensive identification and analysis of all raw materials.
   This product may have certain quality and technical risks.
- 2. This kit removes/reduces some endogenous interfering factors in biological samples during the development process. Not all possible influencing factors have been removed.
- 3. The final experimental results are closely related to factors such as the effectiveness of the reagents, the relevant operations of the experimenter, and the experimental environment at the time. Our company is only responsible for the kit itself and is not responsible for the sample consumption caused by the use of the kit. Please use The user should fully consider the possible usage of the sample and reserve sufficient samples before use.
- 4. In order to achieve good experimental results, please only use the reagents provided in our company's kits, do not mix products from other manufacturers, and operate in strict accordance with the instructions.
- 5. Due to incorrect reagent preparation and microplate reader parameter settings during the operation, abnormal results may result. Please read the instructions carefully and adjust the instrument before the experiment.
- 6. Even if operated by the same personnel, different results may be obtained in two independent experiments. In order to ensure the reproducibility of the results, it is necessary to control every step of the experimental process.

7. The kits will undergo strict quality inspection before shipment. However, due to factors such as transportation conditions, differences in experimental equipment, etc., user test results may be inconsistent with factory data.

8. This kit has not been compared with similar kits from other manufacturers or products using different methods to detect the same target, so inconsistent test results cannot be ruled out.

9. The kit is for research use only. If it is used for clinical diagnosis or any other purpose, our company will not be responsible for any problems arising therefrom, nor will we assume any legal liability.

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