



(For scientific research use only, not for clinical diagnosis!)

Human T-lymphotropic virus antibody (HTLV-ab)

ELISA kit Instructions for use Product number:

BY-EH113173 Specifications: 48T/96T

Please read the instructions carefully before use. If you have any questions,

please contact us through the following methods: Official hotline: 025-5229-

8998 Sales department phone: 13914481711 Technical phone: 15950492658

Contact email: 3224949330@qq.com Company website:

www.byabscience.cn For specific shelf life, please see the reagents Box

packaging label. Please use the kit within the shelf life.

When contacting us, please provide the product number and production date (see box label) so that we can serve you more efficiently.

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Kit performance Physical properties: Each liquid component is clear and transparent, with no precipitation or floc. Microplate aluminum foil bags should be vacuum packed without damage or leakage.

Negative control OD value: less than 0.2.

Positive control OD value: greater than 0.8.

Precision: intra-batch variation coefficient CV% is less than 10%; inter-batch variation coefficient CV% is less than 15%.

Recovery rate: The recovery rate is between 85%-115%.

Specificity: This kit recognizes native and recombinant human T-lymphotropic virus antibodies (HTLV-ab) and has no crossover with structural analogs. **Stability:** Stored at 2°C-8°C, validity period is 6 months.

Purpose: Used for qualitative detection of human T-lymphotropic virus antibodies (HTLV-ab) in samples such as serum, plasma, cell culture supernatants, and tissues.

Shelf life: Stored at 2°C-8°C, valid for 6 months.

Experimental principle

The kit uses an indirect enzyme-linked immunosorbent assay (ELISA). To the microwells pre-coated with human T-lymphotropic virus antibody (HTLV-ab) capture antigen, add specimen, negative and positive controls in sequence, then add HRP-labeled detection antibody, incubate and wash thoroughly. The substrate TMB is used for color development. TMB is converted into blue under the catalysis of peroxidase, and converted into the final yellow under the action of acid. The depth of the color is positively correlated with the presence of human T-lymphotropic virus antibodies (HTLV-ab) in

the sample. Use a microplate reader to measure the absorbance (OD value) at a wavelength of 450 nm to determine negative and positive.

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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°C 14 days
negative control	0.3mL	0.3mL	2-8°C 14 days
positive control	0.3mL	0.3mL	2-8°C 14 days
sample diluent	3ml	6ml	2-8°C 180 days
HRP labeled antibodies	5ml	10ml	2-8°C 14 days
Chromogenic substrate	3ml	6ml	2-8°C 180 days
Chromogenic substrate	3ml	6ml	2-8°C 180 days
stop solution	3ml	6ml	2-8°C 180 days
20×Lotion	15ml	25ml	2-8°C 180 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
- 6) Ionized water
- 6) Vortex oscillator, microplate oscillator

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Notes 1) For scientific research use only,

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- 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 $450\pm10\text{nm}$ 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 $2000\times g$ 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 $2000\times g$ 20 分钟。为消除血小板的影响，建议在 2-8℃进一步离心 $10000\times g$ 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， $10000-14000\times g$ 离心 3-5 分钟，取上清。立即分析或分装后-20℃冷冻保存。

组织匀浆——用预冷的 PBS (0.01M, pH=7.4) 冲洗组织，去除残留血液（匀浆中裂解的红细胞会影响测量结果），称重后将组织剪碎。将剪碎的组织与对应体积的 PBS (一般按 1:9 的重量体积比，比如 1g 的组织样品对应 9mL 的 PBS，具体体积可根据实验需要适当调整，并做好记录。推荐在 PBS 中加入蛋白酶抑制剂) 加入玻璃匀浆器中，于冰上充分研磨。为了进一步裂解组织细胞，可以对匀浆液进行超声破碎，或反复冻融。最后将匀浆液于 $5000\times g$ 离心 5~10 分钟，取上清检测。

尿液——用无菌管收集，离心 $2000\times g$ 20 分钟。仔细收集上清。如有沉淀形成，应再次离心。



试剂准备 1、使用前，所有的组分都要至少复温 60min，确保充分复温到室温。

2、浓缩洗涤液：从冰箱取出的浓缩洗涤液，会有结晶产生，这属于正常现象，水浴加热使结晶完全溶解。浓缩洗涤液与蒸馏水，按 1:20 稀释，即 1 份的浓缩洗涤液，添加 19 份的蒸馏水。

操作程序 所有试剂和组分都先恢复到室温，标准品、质控品和样品，建议做复孔。

- 1、按前面说明书描述的方法，配制好试剂盒各种组分的工作液。
- 2、从铝箔袋中取出所需板条，剩余的板条用自封袋密封放回冰箱。
- 3、设置标准品孔和样本孔，标准品孔各加不同浓度的标准品 50 μ L；
- 4、样本孔中加入待测样本 50 μ L；空白孔不加。
- 5、除空白孔外，标准品孔和样本孔中每孔加入辣根过氧化物酶（HRP）标记的检测抗体 100 μ L，用封板膜封住反应孔，37°C 水浴锅或恒温箱温育 60min。
- 6、弃去液体，吸水纸上拍干，每孔加满洗涤液（350 μ L），静置 1min，甩去洗涤液，吸水纸上拍干，如此重复洗板 5 次（也可用洗板机洗板）。
- 7、每孔加入底物 A、B 各 50 μ L，37°C 避光孵育 15min。
- 8、每孔加入终止液 50 μ L，15min 内，在 450nm 波长处测定各孔的 OD 值。

[检测结果的解释]

- 1、阴性对照 OD 值：小于 0.2。
- 2、阳性对照 OD 值：大于 0.8。

3、阳性判断（Cut-Off 值）：阴性对照 OD 值+0.25，样本 OD 值大于阈值，判定为阳性，反之，为阴性。

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[问题分析] 若实验效果不好, 请及时对显色结果拍照, 保存实验数据, 保留所用板条及未使用试剂, 然后联系我公司技术支持为您解决问题。同时您也可以参考以下资料: [问题解答]

问题描述	可能原因	相对对策
标准曲线梯度差	吸液或加液不准	检查移液器及吸头
	平衡时间太短	保证充足的平衡时间
	洗涤不完全	保证洗涤时间和洗涤次数及每孔的加液量
显色很弱或无色	孵育时间太短	保证充足的孵育时间
	实验温度不正确	使用推荐的实验温度
	试剂体积不够或漏加	检查吸液及加液过程, 保证所有试剂按顺序足量添加
	稀释不正确	
	酶标记物失活或底物失效	混合酶结合物和底物, 通过迅速显色来检查判断
读数数值低	酶标仪设置不正确	在酶标仪上检查波长及滤光片设置
		提前打开酶标仪预热
变异系数大	加液不正确	检查加液情况
背景值高	检测抗体的工作浓度过高	使用推荐的稀释倍数
	酶标板洗涤不完全	保证每步清洗完全; 如果用自动洗板机, 请检查所有的出口是否有堵塞; 是否使用试剂盒配备的洗涤液
	洗液有污染	配制新鲜的洗液
灵敏度低	ELISA 试剂盒保存不当	按说明书要求保存相关试剂
	读数前未终止	OD 读数前应在每孔中加入终止剂



声明

1. 限于现有条件及科学技术水平，尚不能对所有原料进行全面的鉴定分析，

本产品可能存在一定的质量技术风险。

2. 本试剂盒在研发过程中去除/降低了生物学样本中的一些内源性干扰因素，

并非所有可能影响的因素均已去除。

3. 最终的实验结果与试剂的有效性、实验者的相关操作以及当时的实验环境

等因素密切相关，本公司只对试剂盒本身负责，不对因使用试剂盒所造成 的

样本消耗负责，请使用者使用前充分考虑到样本可能的使用量，预留充 足的

样本。

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 that detect the same target substance using different methods, 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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