

Datasheet for ABIN457548

**anti-Human Papilloma Virus 18 E2 (HPV-18 E2) (AA 1-83)
antibody**[Go to Product page](#)**1** Validation**2** Images

Overview

Quantity:	100 µg
Target:	Human Papilloma Virus 18 E2 (HPV-18 E2)
Binding Specificity:	AA 1-83
Reactivity:	Human Papillomavirus (HPV)
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	Un-conjugated
Application:	ELISA, Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant full-length HPV-18 E2-protein purified from E. coli
Clone:	2E7
Isotype:	IgG
Specificity:	Reacts with HPV-18 E2-protein.
Purification:	purified with Protein G affinity chromatography

Target Details

Target:	Human Papilloma Virus 18 E2 (HPV-18 E2)
Target Type:	Viral Protein
Background:	Human papillomaviruses (HPV) are small DNA viruses which infect epithelia of the skin and

Target Details

mucosa. Over 90 types have been identified and they mostly cause a variety of benign lesions such as warts and verrucae. However, some subtypes, notably types 16 and 18, 31 and 33, have been confirmed as agents which cause cervical cancer. Human Papillomavirus (HPV) E7 proteins have cellular transforming and trans-activating activities

Application Details

Application Notes: ELISA: 1: 2 000, WB: 1: 1000. This antibody does not work in IP. Monoclonal antibody working titer has to be established practically for each particular antigen and assay format

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 mg/ml

Buffer: PBS pH 7.4, with 0.1%

Preservative: Sodium azide

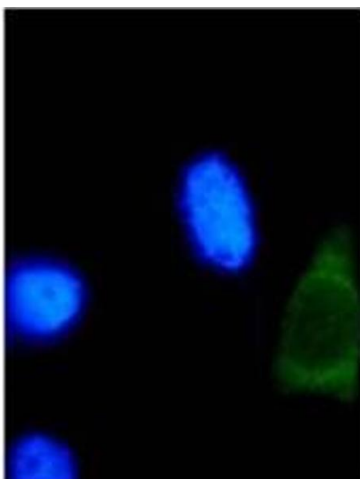
Precaution of Use: This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling Advice: Divide antibody into aliquots prior usage. Avoid multiple freeze-thaw cycles.

Storage: -20 °C

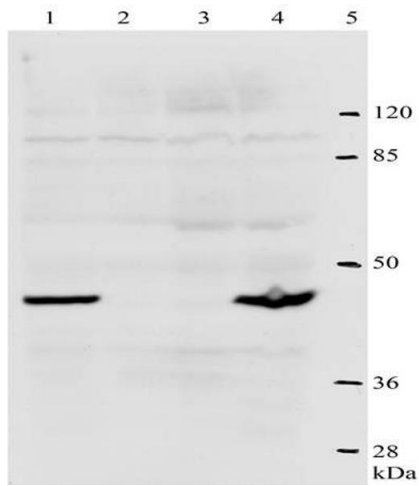
Storage Comment: This product is shipped in non-frozen liquid form in ambient conditions

Images



Immunofluorescence

Image 1. IF analysis of HPV-18 E2 protein in U2OS cells. IF was carried out with HeLa cells transfected with plasmid expressing HPV-18 E2 protein. All the nuclei were stained by DAPI. Green color represents nucleus-localized HPV-18 E2 detected by Mab 2E7.



Western Blotting

Image 2. Western-Blot analysis of HPV-18 E2 protein. WB was carried out with 2E7 Mab using the lysates of U2OS and HeLa cells. Lanes 1 and 4 are according cells transfected with plasmid expressing HPV-11 E2 protein, lanes 2 and 3 are plain U2OS and HeLa cells. Last lane represents marker



Successfully validated (Unfolding Profile (UP))

by [NanoTemper Technologies](#)

Report Number: 102723

Date: Nov 05 2018

Target: HPV-18

Lot Number: A10P2E71-001

Method validated: Unfolding Profile (UP)

Positive Control: ABIN457548

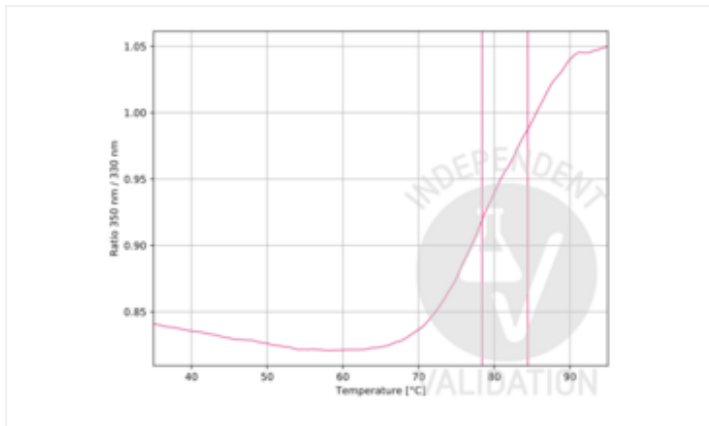
Notes: Passed. ABIN457548 showed a clear unfolding profile with two detected unfolding events with T_i s at 78.4°C and 84.4°C. It is not unusual for antibodies to show more than one unfolding transition, as they are composed of distinct domains that may unfold independently and at different temperatures. This result suggests that the protein is properly folded and functional.

Primary Antibody: ABIN457548

Protocol:

- Dilute ABIN457548 1:10 in PBS buffer (Roth, 1058.1, lot 285231988) to get a final volume of 15µl at a concentration of 0.67µM.
- Load sample into Tycho capillary (NanoTemper Technologies, TY-C001).
- Run Tycho measurement.

Experimental Notes: Tycho is designed to run quick and precise protein quality check experiments. Tycho uses intrinsic protein fluorescence to follow protein unfolding while running a fast thermal ramp, yielding results in 3min. A protein's unfolding behavior is characterized by various parameters, most notably the inflection temperature (T_i). The T_i can be used to identify properly folded protein, to compare different batches, or to analyze the influence of storage/transport conditions on a protein. An absence of T_i would suggest that the protein is already unfolded and therefore most likely nonfunctional.



Validation image no. 1 for anti-Human Papilloma Virus 18 E2 (HPV-18 E2) (AA 1-83) antibody (ABIN457548)

Unfolding profile of ABIN457548. The fluorescence signal is plotted against temperature. The native (folded) protein has a low signal at the beginning of the experiment, which increases upon unfolding, showing two unfolding events. The vertical lines indicate the T_s s at 78.4 °C and 84.4 °C.