



Anti-human ORF37 N-terminal , Rabbit-Polyclonal Antibody

Catalog No. GB-10486
Antigen species: Human
Host species: Rabbit

Quantity: 100µg
Reactivity: Human
Form: Peptide affinity purified antibody

Applications tested: ELISA, Western blot

Target description

During the past decade the role of the *ERBB2* (*neu/HER2*) oncogene as an important predictor of patient outcome and response to various therapies in breast cancer has been clearly established. The C35 (C17orf37) is a novel tumor biomarker abundantly expressed in breast cancer. Identification of shared tumor-specific targets is useful in developing broadly applicable therapies. The C35 gene is located on chromosome 17q12, 505 nucleotides from the 3' end of the *ERBB2* oncogene, the antigenic target for trastuzumab (Herceptin) therapy. The chromosomal arrangement of the genes encoding C35 and *ERBB2* is tail to tail. The ORF 37 open reading frame encodes a 12-kDa protein of unknown function.

Antigen

This polyclonal antibody was raised by immunizing rabbit with a synthetic peptide located in the N-terminal of human ORF37.

Application

The antibody specificity was assayed by ELISA with the synthetic peptide antigen of ORF37 protein and by Western Blot analysis with the recombinant human ORF37 shown as follows. The antibody titer is more than 1000k for ELISA. It has not been tested in the other applications. However, for the first testing, we recommend 1/10,000 dilution for ELISA, 1/5,000 dilution for Western blot analysis (WB) of recombinant protein, 1/1,000 dilution for tissue extracts or cell lysates, 1/100 dilution for immunohistochemistry (IHC) staining on frozen cryosections, 1/50 dilution for IHC staining on paraffin embedded sections.

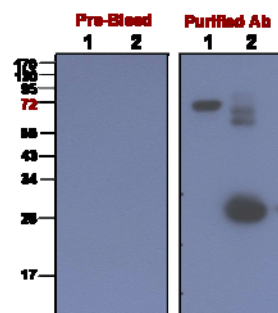
Related Products

1. Anti-TEM1 pAb (GB-10374).
2. Anti-TEM2 pAb (GB-30131)
3. Anti-TEM3 pAb (GB-30132).
4. Anti-TEM4 pAb (GB-30133)
5. Anti-TEM5 pAb (GB-10011)

Ab dilution	Pre-bleed	Purified-Ab
1:1K	0.134	1.592
1:10K	0.098	1.449
1:100K	0.090	0.840
1:1,000K	0.087	0.208
Titer		>1000K

ELISA Procedure

Antigen is coated on EIA strips at 1µg per well. Add 200µl of blocking buffer and then wash wells with PBST buffer. Antiserum or peptide specific purified antibody GB-10486 is diluted in series as 10³~10⁶ folds and added in separate wells. Incubate antibody for 1hr. Wash unbound antibodies and add anti-rabbit IgG-HRP conjugate. Wash the plates and add substrate to develop color for 5 min. Read absorbance (ABS) at 650 nm. Amount of color is directly proportional to the amount of antibodies. Antibody titer is defined as >0.1 of ABS of antiserum minus pre-bleed serum.



Lane 1 is ~72 kDa human ORF37 fusion protein
 Lane 2 is ~26 kDa human ORF37 (repeated ORF37, 2 copies). 5000x dilution of the rabbit anti-ORF37 polyclonal antibody (purified Ab).

Western blotting Protocol

1. Block with 3%BSA/TBST for 1 hour at RT.
2. Wash blot with 0.05% TBST 3 X 15 minutes.
3. Add 5000X dilution of antibody.
4. Incubate for 1 hour at RT.
5. Wash blot with 0.05% TBST 3 X 15 minutes.
6. Add appropriate amount of correct secondary antibody, goat anti-rabbit antibody conjugated with HRP). Incubate for 1 hour at RT.
7. Wash blot 3 X 15 minutes with 0.05% TBST at RT.
8. Add HRP substrate and develop

Storage

It is supplied as peptide affinity purified antibody in lyophilized powder. Redissolve the powder with 100 microliter sterile water will restore to the original concentration 1mg/ml (1xPBS). Store at 4°C for short-term application. For long-term storage, aliquot and store at -20°C.

References

1. Evans EE., Henn AD., Jonason A., Paris MJ., Schiffhauer LM., Borrello MA., Smith ES., Sahasrabudhe DM., Zauderer M. C35 (C17orf37) is a novel tumor biomarker abundantly expressed in breast cancer. *Mol Cancer Ther.* 2006 Nov; 5(11):2919-30.
2. Haque M., Wang V., Davis DA., Zheng ZM., Yarchoan R. Genetic Organization and Hypoxic Activation of the Kaposi's Sarcoma-Associated Herpesvirus ORF34-37 Gene Cluster. *J Virol.* 80(14): 7037-51, 2006.
3. Glaunsinger B., Ganem D. Lytic KSHV infection inhibits host gene expression by accelerating global mRNA turnover. *Mol Cell.* 13(5): 713-23, 2004.