

# CDV3 (E-13): sc-99337

## BACKGROUND

The EGF receptor family comprises several related receptor tyrosine kinases that are frequently overexpressed in a variety of carcinomas. Members of this receptor family include EGFR (HER1), Neu (ErbB-2, HER2), ErbB-3 (HER3), and ErbB-4 (HER4), which form either homodimers or heterodimers upon ligand binding. Neu, a glycoprotein, undergoes transactivation upon hetero-dimerization with other EGF receptor family members. Activation of Neu potentiates tumor cell motility and protease secretion and invasion, and also modulates cell cycle checkpoint function, DNA repair and apoptotic responses. Amplification and/or overexpression of Neu occurs in 20-30% of breast carcinomas, and detection of increased Neu expression can be a predictor of disease prognosis. The CDV3 protein is a 258 amino acid protein that localizes in the cytoplasm. It acts as a repressor of Neu and subsequently may be involved in the progression of some cancers, including breast cancer, gliomas and prostate tumors.

## REFERENCES

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- Ukita, Y., Kato, M. and Terada, T. 2002. Gene amplification and mRNA and protein overexpression of c-ErbB-2 (HER-2/Neu) in human intrahepatic cholangiocarcinoma as detected by fluorescence *in situ* hybridization, *in situ* hybridization and immunohistochemistry. *J. Hepatol.* 36: 780-785.
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## CHROMOSOMAL LOCATION

Genetic locus: CDV3 (human) mapping to 3q22.1; Cdv3 (mouse) mapping to 9 F1.

## SOURCE

CDV3 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CDV3 of human origin.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-99337 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CDV3 (E-13) is recommended for detection of CDV3 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CDV3 (E-13) is also recommended for detection of CDV3 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for CDV3 siRNA (h): sc-78042, CDV3 siRNA (m): sc-142241, CDV3 shRNA Plasmid (h): sc-78042-SH, CDV3 shRNA Plasmid (m): sc-142241-SH, CDV3 shRNA (h) Lentiviral Particles: sc-78042-V and CDV3 shRNA (m) Lentiviral Particles: sc-142241-V.

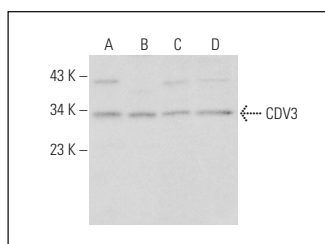
Molecular Weight of CDV3: 27 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



CDV3 (E-13): sc-99337. Western blot analysis of CDV3 expression in U-251-MG (A), MCF7 (B), Jurkat (C) and K-562 (D) whole cell lysates.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.