



Qty: 100 µg/400 µL

Rabbit anti-PCDGF

Catalog No. 40-3400

Lot No.

Rabbit anti-PCDGF

FORM

This polyclonal antibody is supplied as a 400 µL aliquot at a concentration of 0.25 mg/mL in phosphate buffered saline (pH 7.4) containing 0.1% sodium azide. This antibody is epitope-affinity purified from rabbit antiserum.

PAD: ZMD.454

IMMUNOGEN

Synthetic peptide derived from the C-terminal region of human PCDGF (PC cell-derived growth factor, GP88, acrogranin, granulin precursor, epithelin precursor, or progranulin)

SPECIFICITY

This antibody reacts with the ~64-88 kDa PCDGF protein.

REACTIVITY

Reactivity has been confirmed with human MDA-MB-231 breast adenocarcinoma, PC-3 prostate adenocarcinoma (bone metastatic site), HeLa cervical carcinoma, and HT1080 fibrosarcoma lysates.

Sample	Immunoprecipitation	Western Blotting
Human	++	+++

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)

USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Western Blotting: 1-3 µg/mL

Immunoprecipitation: 7 µg/ reaction

STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

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PI403400

(Rev 10/08) DCC-08-1089

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BACKGROUND

PCDGF, also known as PC cell-derived growth factor, GP88, acrogranin, granulin precursor, epithelin precursor, or progranulin, is a glycoprotein and growth factor involved in tumorigenesis, the regulation of mitosis, non-neoplastic proliferative disorders, early embryonic development, cell division, cell invasion, cell survival, and hypothalamic differentiation.¹ Because PCDGF regulates multiple steps during carcinoma progression, it may represent a future therapeutic target.¹

PCDGF mediates resistance to the cancer drug tamoxifen, and promotes tumor growth of human breast cells.² Breast cancer samples that are estrogen receptor-positive and also overexpress PCDGF may therefore represent adverse consequences for patients if they are treated with tamoxifen.² PCDGF may promote metastasis and angiogenesis in human breast cancer cells, in addition to stimulating their proliferation and survival.³

PCDGF staining is observed in breast carcinoma, whereas it is almost always negative in benign breast epithelium.⁴ PCDGF expression is more common in invasive ductal carcinoma than in invasive lobular carcinoma.⁴ PCDGF expression in human breast carcinoma correlates with clinicopathological variables such as tumor grade, proliferation index, and p53 expression, suggesting an important role of PCDGF in breast cancer pathogenesis.⁴

PCDGF is also expressed in human multiple myeloma (MM) cell lines, human prostatic intraepithelial neoplasia (PIN) and invasive prostatic adenocarcinoma.⁵⁻⁶

REFERENCES

1. He Z, et al. *Cancer Res* 62(19):5590-5596, 2002.
2. Tangkeangsirisin W, et al. *Cancer Res* 64(5):1737-1743, 2004.
3. Tangkeangsirisin W and Serrero G. *Carcinogenesis* 25(9):1587-1592, 2004.
4. Serrero G and Ioffe OB. *Human Pathol* 34(11):1148-1154, 2003.
5. Wang W, et al. *Clin Cancer Res* 9(6):2221-2228, 2003.
6. Pan CX, et al. *Clin Cancer Res* 10(4):1333-1337, 2004.

RELATED PRODUCTS

Product	Conjugate	Cat. No.
Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

Conjugate	ZyMAX™ Goat x Rabbit IgG (H+L)	ZyMAX™ Goat x Mouse IgG (H+L)
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy™3	81-6115	81-6515
Cy™5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

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