New Item

INTERNATIONAL

Anti-Interferon Inducible Protein 27 (IFI 27) antibodies Cat # IFI-101AP and IFI-112AP.

Treatment of breast carcinoma MCF7cells with estradiol led to induction of a new 27 kDa protein, the cDNA was later cloned and identified as p27. This highly hydrophobic protein of 122 amino acids has 33% over all sequence similarity to the product of the 6-16 gene (1), that is induced by alfa/beta type interferons. It has been shown that p27is transcriptionaly induced by interferon alfa in various human cell lines. The induction induced by interferon alfa is independent of the presence of estradiol receptors on the cells. High levels of p27 mRNA, detected by Northern blotting, was found in 50% of the primary breast carcinoma cells, suggesting p27 can be a diagnostic marker for breast carcinoma detection (2). Examination of p27 expression by in situ hybridization in p27 over expressing tumors suggest that p27 gene is localized in cancer cells and some times also in fibroblastic cells of tumor stroma. IFI27 mRNA expression is highly up-regulated in lesional psoriatic epidermis and in non-lesional keratinocytes. It was also expressed in lichen planus, chronic eczema, cutaneous squamous cell cancers, and during normal wound repair when IFI27 was found in the proliferating subpopulation of keratinocytes (3). P27 Further studies are now necessary to elucidate the cause of p27 gene overexpression in breast carcinoma and in particular to determine whether it corresponds to chromosomal rearrangements in the 14q32 region and/or to induction by interferons of the alpha/beta type.

P27 protein is highly hydrophobic, containing 2 trans-membrane spanning regions localized on human chromosome in band q32. The apparent molecular weight of IFI27 is 26-29 kDa on reduced SDS-PAGE. IFI induced proteins like P27 and P16 genes have also showed potential targets for anti-angiogenic therapy employing INFs.

The IFI27-selective antibodies were generated in rabbits against unique N, and C-terminal peptides that are unique to P27 IFI27 protein, the C-terminal peptide antibodies (IFI-112AP) will also label the short splice variant of the IFI27 protein (p16). FabGennix Inc. has generated specific rabbit anti-IFI27 antibodies using linear and multiple antigenic peptide (MAP) methodology. These antibodies have been characterized by ELISA and dot blot assays using various breast cancer cell lines. FabGennix Inc. has also produced other elated antibodies that will facilitate breast and other type of cancer detection. These antibodies include Anti-SERHL, Anti-mucin, Anti-p14arf, Anti-src, Anti-Ras, Anti-CAB2, Anti-XTP4 and others. Fab*Gennix Inc.* also provides limited quantities of antigenic blocking peptides for IFI27 antibodies.

Catalog #	Description	Antigen/Positive control	Cross reactivity	Qty	Price
IFI27-101AP	Affinity purified IFI27 Antibody	Near N-terminal peptide	H	100 ug	$235
IFI27-112AP	Affinity purified IFI27 Antibody	Near C-terminal MAP peptide	H	100 ug	$235
P-IFI27	N-terminal antigenic blocking peptide	N-terminal peptide	250 ug	150ul	$115
P-MAPIFI27	C-terminal antigenic blocking MAP	C-terminal MAP	250 ug	150ul	$135

R = rat; M = mouse; H = humans; R = rabbit * Actual volume is between 150-200 ul; WB, Western Blot analyses; IMM, Immunoprecipitation; IHC, Immunohistochemistry, n.d, not determine; * cross reactivity to other species have not been determined.

Concentration: IFI27-101AP and IFI27-112AP = IgG concentration 0.5-0.75 mg/ml.

Applications: ELISA: Antibody dilution 1:10,000 -100,000 for ELISA or DOT blot assy. W.B: n.d. IMM: n.d; IHC n.d.

Protocols: Standard protocol for various applications (Western blot; immunoprecipitation and immunohistochemistry) of this antibody is provided with the product specification sheet, however, FabGennix Inc. recommends investigators to optimize conditions.

Form/Storage: The antiserum is supplied in antibody stabilization buffer. For long-term storage of antibody, store at -20°C FabGennix Inc. does not recommend storage of very dilute antibody solutions unless they are prepared in specially formulated multi use antibody dilution buffer (Cat # DiluOBuffer). Working solutions of antibodies in DiluOBuffer should be filtered through 0.45µ filter after every use for long-term storage.

References:

1. R. L. Friedman, S. P. Manly, M. McMahon, I. M. Kerr, and G. R. Stark, Cell, 38: 745-755, 1984
2. Rasmussen UB, Wolf C, Mattei MG, Chenard MP, Bellocq JP, Chambon P, Rio MC, Basset P. Identification of a new interferon-alphainducible gene (p27) on human chromosome 14q32 and its expression in breast carcinoma. Cancer Res. 1993 Sep 1;53(17):4096-101.
3. Suomela S, Cao L, Bowcock A, Saarialho-Kere U. Interferon alpha-inducible protein 27 (IFI27) is upregulated in psoriatic skin and certain epithelial cancers. J Invest Dermatol. 2004 Mar;122(3):717-21.
4.

Note: Briefly centrifuge antibodies to collect liquid at the bottom. Aliquot in working volumes before long-term storing at -20°C. Repeated freeze/thaw may result in appearance of higher molecular weight immunoreactive bands.

* For users who may require large amounts of IFI27-101AP and IFI27-112AP, please enquire about bulk material discounts.
This Product is for Research Use Only and is NOT intended for use in humans or clinical diagnosis.