

Datasheet for ABIN7539328 **FGFR3 Protein (Soluble)**



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Overview

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|--------------------------|--------------|
| Quantity: | 5 µg |
| Target: | FGFR3 |
| Protein Characteristics: | Soluble |
| Origin: | Human |
| Source: | Insect Cells |
| Protein Type: | Recombinant |

Product Details

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| Purpose: | FGFR-3(IIIa), soluble |
| Sequence: | ESLGTEQRV VGRAAEVPGP EPGQQEQLVF GSGDAVELSC PPPGGGPMGP TVWVKDGTGL V PSERLVGP QRLQVLNASH EDSGAYSCRQ RLTQRVLCHF SVRVTDAPSS GDDEDGEDEA E DTGVDTGAP YWTRPERMDK KLLAVPAANT VRFRCPAAGN PTPSISWLKN GREFRGEHRI G GIKLRHQWV SLVMESVPS DRGNYTCVVE NKFGSIRQTY TLDVLESPH RPILQAGLPA N QTAVLGSDV EFHCKVYSDA QPHIQWLKHV EVNGSKVGPD GTPYVTVLKT R |
| Specificity: | Chromosomal location:4q16.3 |
| Characteristics: | Length (aa):290 |
| Purity: | > 95 % by SDS-PAGE |

Target Details

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|-------------------|---|
| Target: | FGFR3 |
| Alternative Name: | FGFR-3 (FGFR3 Products) |

Target Details

Background: Fibroblast growth factor receptor 3, FGFR-3/ CD333, The Fibroblast growth factor receptors (FGFRs) are a family of receptor tyrosine kinases that play key roles in proliferation, differentiation, and tumorigenesis. The FGFR3(IIIb) isoform was identified as the major family member expressed in normal human urothelium. Already in 2005 a splice variant, FGFR3 Δ TM, lacking exons encoding the COOH-terminal half of immunoglobulin-like domain III and the transmembrane domain was described. Previous reports had assumed that this would be a cancer-specific splice variant but in 2005 it was shown that FGFR3 Δ TM is a normal transcript in NHU cells and is translated, N-glycosylated, and secreted. Primary urothelium expressed high levels of FGFR3 Δ TM transcripts. In culture, levels were reduced in actively proliferating cells but increased at confluence and as cells approached senescence. Cells overexpressing FGFR3 IIIb showed FGF1-induced proliferation, which was inhibited by the addition of FGFR3 Δ TM. In bladder tumor cell lines derived from aggressive carcinomas, there were significant alterations in the relative expression of isoforms including an overall decrease in the proportion of FGFR3 Δ TM and predominant expression of FGFR3 IIIc in some cases. In summary, alternative splicing of FGFR3 IIIb in NHU cells represents a normal mechanism to generate a transcript that regulates proliferation and in bladder cancer, the ratio of FGFR3 isoforms is significantly altered.

Molecular Weight: 31.7 kDa

Gene ID: 2261

NCBI Accession: [NM_022965](#), [NP_075254](#)

UniProt: [P22607-3](#)

Pathways: [RTK Signaling](#), [Fc-epsilon Receptor Signaling Pathway](#), [EGFR Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [Stem Cell Maintenance](#), [Growth Factor Binding](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized