

Recombinant Human Fibroblast growth factor receptor 3(FGFR3),partial

Catalog No: #AP70307

Package Size: #AP70307-1 20ug #AP70307-2 100ug #AP70307-3 1mg

Description

Product Name	Recombinant Human Fibroblast growth factor receptor 3(FGFR3),partial
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:23-375aaSequence Info:Extracellular Domain
Other Names	CD333
Accession No.	P22607
Calculated MW	42.1 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	ESLGTEQRVVGRAAEVPGPEPGQQEQLVFGSGDAVELSCPPPGGGPMGPTVWVKDGTGLVPSERVLVGPQ RLQVLNASHEDSGAYSCRQLTQRVLCHFSVRVTDAPSSGDDDEGEDEAEDTGVDTGAPYWTRPERMDKK LLAVPAANTVRFRCPAAGNPTPSISWLKNGREFRGEHRIGGIKLRHQWLSVMESVVPSPDRGNITCVVENKF GSIRQTYTLDLERSPHRPILQAGLPANQTAVLGSDVEFHCKVYSDAQPHIQWLKHVEVNGSKVGPDPGTPYVT VLKTAGANTTDKELEVLSLHNVTFEDAGEYTCLAGNSIGFSHSAWLVLPAEEELVEADEAGSVYAG
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

Tyrosine-protein kinase that acts as cell-surface receptor for fibroblast growth factors and plays an essential role in the regulation of cell proliferation, differentiation and apoptosis. Plays an essential role in the regulation of chondrocyte differentiation, proliferation and apoptosis, and is required for normal skeleton development. Regulates both osteogenesis and postnatal bone mineralization by osteoblasts. Promotes apoptosis in chondrocytes, but can also promote cancer cell proliferation. Required for normal development of the inner ear. Phosphorylates PLCG1, CBL and FRS2. Ligand binding leads to the activation of several signaling cascades. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. Phosphorylation of FRS2 triggers recruitment of GRB2, GAB1, PIK3R1 and SOS1, and mediates activation of RAS, MAPK1,ERK2, MAPK3,ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway. Plays a role in the regulation of vitamin D metabolism. Mutations that lead to constitutive kinase activation or impair normal FGFR3 maturation, internalization and degradation lead to aberrant signaling. Over-expressed or constitutively activated FGFR3 promotes activation of PTPN11, SHP2, STAT1, STAT5A and STAT5B. Secreted isoform 3 retains its capacity to bind FGF1 and FGF2 and hence may interfere with FGF signaling

References

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Du H. , Sun H., Bradshaw-Cordum H., Ali J., Carter J., Cordes M., Harris A., Isak A., van Brunt A., Nguyen C., Du F., Courtney L., Kalicki J., Ozersky P., Abbott S., Armstrong J., Belter E.A., Caruso L., Cedroni M., Cotton M., Davidson T., Desai A., Elliott G., Erb T., Fronick C., Gaige T., Haakenson W., Haglund K., Holmes A., Harkins R., Kim K., Kruchowski S.S., Strong C.M., Grewal N., Goyea E., Hou S., Levy A., Martinka S., Mead K., McLellan M.D., Meyer R., Randall-Maher J., Tomlinson C., Dauphin-Kohlberg S., Kozlowicz-Reilly A., Shah N., Swearengen-Shahid S., Snider J., Strong J.T., Thompson J., Yoakum M., Leonard S., Pearman C., Trani L., Radionenko M., Waligorski J.E., Wang C., Rock S.M., Tin-Wollam A.-M., Maupin R., Latreille P., Wendl M.C., Yang S.-P., Pohl C., Wallis J.W., Spieth J., Bieri T.A., Berkowicz N., Nelson J.O., Osborne J., Ding L., Meyer R., Sabo A., Shotland Y., Sinha P., Wohldmann P.E., Cook L.L., Hickenbotham M.T., Eldred J., Williams D., Jones T.A., She X., Ciccarelli F.D., Izaurralde E., Taylor J., Schmutz J., Myers R.M., Cox D.R., Huang X., McPherson J.D., Mardis E.R., Clifton S.W., Warren W.C., Chinwalla A.T., Eddy S.R., Marra M.A., Ovcharenko I., Furey T.S., Miller W., Eichler E.E., Bork P., Suyama M., Torrents D., Waterston R.H., Wilson R.K. Nature 434:724-731(2005)Research Topic:Apoptosis

Note: This product is for in vitro research use only and is not intended for use in humans or animals.