

Recombinant human Bcr + Ret protein ab204103

2 Images

| Description | |
|-----------------------|--|
| Product name | Recombinant human Bcr + Ret protein |
| Biological activity | The specific activity of ab204103 was determined to be 110 nmol/min/mg. |
| Purity | > 80 % Densitometry. Affinity purified. |
| Expression system | Baculovirus infected Sf9 cells |
| Accession | <u>P11274</u> <u>P07949-2</u> |
| Protein length | Protein fragment |
| Animal free | No |
| Nature | Recombinant |
| Amino Acid Sequence 1 | |
| Species | Human |
| Sequence | MVDPVGFAEAWKAQFPDSEPPRMELRSVGDIEQEELERC KASIRRLEQEVN QERFRMYLQTLLAKEKKSYDRQRWGFRRAAQAPDGASE PRASASRPQPA PADGADPPPAEEPEARPDGEGSPGKARPGTARRPGAAA SGERDDRGPPAS VAALRSNFERIRKGHGQPGADAEKPFYVNVEFHHERGLV KVNDKEVSDRI SSLGSQAMQMERKKSQHGAGSSVGDSRPPYRGRSSE SSCGVDGDYEDAE LNPRFLKDNLIDANGGSRPPWPPLEYQPYQSIYVGMME GEGKGPLLRSQ STSEQEKRLTWPRRSYSPRSFEDCGGGYTPDCSSNENLT SSEEDFSSGQS SRVSPSPTTYRMFRDKSRSPSQNSQQSFSSSPPTPQC HKRHRHCPVVVS EATVGVKRTGQWPNDGEGAFHGDGEDPKWEFPRKNLV LGKTLGEGEFG KVVKATAFHLKGRAGYTTVAVKMLKENASPSSELRDLLSEF NVLKQVNHPH VIKLYGACSQDGPLLLMEYAKYGSLRGFLRESRKVGPGYL |

GSGGSRNSS
 SLDHPDERALTMGDLISFAWQISQGMQYLAEMKLVHRDL
 AARNILVAEGR
 KMKISDFGLSRDVYEEDSYVKRSQGRIPVKWWMAIESLFDHI
 YTTQSDVWS
 FGVLLWEITLGGNPYPGIPPERLFNLLKTGHRMERPDNC
 SEEMYRLMLQ
 CWKQEPDKRPVFADISKDLEKMMVKRRDYLDLAASTPS
 DSLYDDGLSEE
 ETPLVDCNNAPLPRALPSTWIENKLYGRISHAFTRF

| | |
|-----------------------------------|------------------------|
| Predicted molecular weight | 140 kDa including tags |
| Amino acids | 1 to 426 |
| Tags | GST tag N-Terminus |
| Amino Acid Sequence 2 | |
| Species | Human |
| Amino acids | 713 to 1072 |

Specifications

Our **Abpromise guarantee** covers the use of **ab204103** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| | |
|---------------------|--------------------------------|
| Applications | Functional Studies SDS-PAGE |
| Form | Liquid |

Preparation and Storage

| | |
|------------------------------|---|
| Stability and Storage | Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle. pH: 7.50 Constituents: 0.79% Tris HCl, 0.87% Sodium chloride, 0.31% Glutathione, 0.003% EDTA, 0.004% DTT, 0.002% PMSF, 25% Glycerol (glycerin, glycerine) This product is an active protein and may elicit a biological response in vivo, handle with caution. |
|------------------------------|---|

General Info

| | |
|------------------|---|
| Relevance | GTPase-activating protein for RAC1 and CDC42. Promotes the exchange of RAC or CDC42-bound GDP by GTP, thereby activating them. Displays serine/threonine kinase activity. Defects in RET may be a cause of colorectal cancer (CRC) [MIM:114500]. Defects in RET are a cause of Hirschsprung disease (HSCR) [MIM:142623]. HSCR is a genetic disorder of neural crest development characterized by the absence of intramural ganglion cells in the hindgut, often resulting in intestinal obstruction. Occasionally, MEN2A or FMTC occur in association with HSCR. Defects in RET are the cause of medullary thyroid carcinoma (MTC) [MIM:155240]. MTC is a rare tumor derived from the C cells of the thyroid. Three hereditary forms are known, that are transmitted in an autosomal dominant fashion: (a) multiple neoplasia type 2A (MEN2A), (b) multiple neoplasia type IIB (MEN2B) and (c) familial MTC (FMTC), which occurs in 25-30% of MTC cases and where MTC is the only clinical manifestation. Defects in RET are the cause of |
|------------------|---|

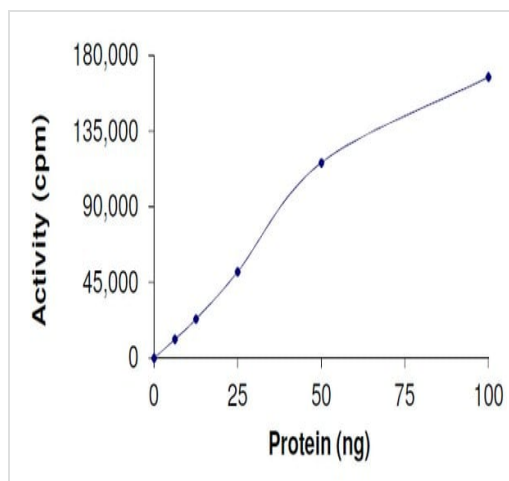
multiple neoplasia type 2B (MEN2B) [MIM:162300]. MEN2B is an uncommon inherited cancer syndrome characterized by predisposition to MTC and phaeochromocytoma which is associated with marfanoid habitus, mucosal neuromas, skeletal and ophthalmic abnormalities, and ganglioneuromas of the intestine tract. Then the disease progresses rapidly with the development of metastatic MTC and a pheochromocytoma in 50% of cases. Defects in RET are a cause of susceptibility to pheochromocytoma (PCC) [MIM:171300]. A catecholamine-producing tumor of chromaffin tissue of the adrenal medulla or sympathetic paraganglia. The cardinal symptom, reflecting the increased secretion of epinephrine and norepinephrine, is hypertension, which may be persistent or intermittent. Defects in RET are the cause of multiple neoplasia type 2A (MEN2A) [MIM:171400]; also known as multiple neoplasia type 2 (MEN2). MEN2A is the most frequent form of medullary thyroid cancer (MTC). It is an inherited cancer syndrome characterized by MTC, phaeochromocytoma and/or hyperparathyroidism. Defects in RET are a cause of thyroid papillary carcinoma (TPC) [MIM:188550]. TPC is a common tumor of the thyroid that typically arises as an irregular, solid or cystic mass from otherwise normal thyroid tissue. Papillary carcinomas are malignant neoplasm characterized by the formation of numerous, irregular, finger-like projections of fibrous stroma that is covered with a surface layer of neoplastic epithelial cells.

Note=Chromosomal aberrations involving RET are found in thyroid papillary carcinomas. Inversion inv(10)(q11.2;q21) generates the RET/CCDC6 (PTC1) oncogene; inversion inv(10)(q11.2;q11.2) generates the RET/NCOA4 (PTC3) oncogene; translocation t(10;14)(q11;q32) with GOLGA5 generates the RET/GOLGA5 (PTC5) oncogene; translocation t(8;10)(p21.3;q11.2) with PCM1 generates the PCM1/RET fusion; translocation t(6;10)(p21.3;q11.2) with RFP generates the Delta RFP/RET oncogene; translocation t(1;10)(p13;q11) with TRIM33 generates the TRIM33/RET (PTC7) oncogene; translocation t(7;10)(q32;q11) with TRIM24/TIF1 generates the TRIM24/RET (PTC6) oncogene. The PTC5 oncogene has been found in 2 cases of PACT in children exposed to radioactive fallout after Chernobyl. A chromosomal aberration involving TRIM27/RFP is found in thyroid papillary carcinomas. Translocation t(6;10)(p21.3;q11.2) with RET. The translocation generates TRIM27/RET and delta TRIM27/RET oncogenes. Defects in RET are a cause of renal adysplasia (RADYS) [MIM:191830]; also known as renal agenesis or renal aplasia. Renal agenesis refers to the absence of one (unilateral) or both (bilateral) kidneys at birth. Bilateral renal agenesis belongs to a group of perinatally lethal renal diseases, including severe bilateral renal dysplasia, unilateral renal agenesis with contralateral dysplasia and severe obstructive uropathy. Defects in RET are a cause of congenital central hypoventilation syndrome (CCHS) [MIM:209880]; also known as congenital failure of autonomic control or Ondine curse. CCHS is a rare disorder characterized by abnormal control of respiration in the absence of neuromuscular or lung disease, or an identifiable brain stem lesion. A deficiency in autonomic control of respiration results in inadequate or negligible ventilatory and arousal responses to hypercapnia and hypoxemia.

Cellular localization

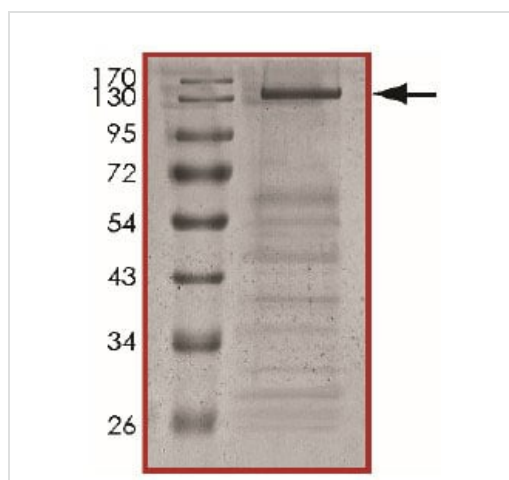
Cell Membrane

Images



Kinase assay using ab204103 showing the specific activity to be 110 nmol/min/mg.

Functional Studies - Recombinant human Bcr + Ret protein (ab204103)



SDS-PAGE analysis of ab204103.

SDS-PAGE - Recombinant human Bcr + Ret protein (ab204103)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery

- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors