

Datasheet for ABIN3090154
BRCC3 Protein (AA 2-316) (His tag)[Go to Product page](#)

1 Image

Overview

| | |
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| Quantity: | 1 mg |
| Target: | BRCC3 |
| Protein Characteristics: | AA 2-316 |
| Origin: | Human |
| Source: | Insect Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This BRCC3 protein is labelled with His tag. |
| Application: | SDS-PAGE (SDS), ELISA, Western Blotting (WB), Crystallization (Crys) |

Product Details

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| Sequence: | AVQVVQAVQA VHLESDAFLV CLNHALSTEK EEVMGLCIGE LNDDTRSDSK FAYTGTEMRT VAEKVDAVRI VHIHSVILR RSDKRKDRVE ISPEQLSAAS TEAERLAELT GRPMRVVGWY HSHPHITVWP SHVDVRTQAM YQMMDQGFVG LIFSCFIEDK NTKTGRVLYT CFQSIQAQKS SESLHGPRDF WSSSQHISIE GQKEEERYER IEIPIHIVPH VTIGKVCLES AVELPKILCQ EEQDAYRRIH SLTHLDSVTK IHNGSVFTKN LCSQMSAVSG PLLQWLEDRL EQNQQHLQEL QQEKEELMQE LSSLE Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us. |
| Characteristics: | <ul style="list-style-type: none">• Made in Germany - from design to production - by highly experienced protein experts.• Human BRCC3 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.• State-of-the-art algorithm used for plasmid design (Gene synthesis). |

Product Details

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

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| Purification: | Two step purification of proteins expressed in baculovirus infected SF9 insect cells: <ol style="list-style-type: none">1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot. |
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| Purity: | >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot. |
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| Sterility: | 0.22 µm filtered |
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| Endotoxin Level: | Protein is endotoxin free. |
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| Grade: | Crystallography grade |
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Target Details

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| Target: | BRCC3 |
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| Alternative Name: | BRCC3 (BRCC3 Products) |
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| Background: | Metalloprotease that specifically cleaves 'Lys-63'-linked polyubiquitin chains |
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Target Details

(PubMed:19214193, PubMed:20656690, PubMed:24075985, PubMed:26344097). Does not have activity toward 'Lys-48'-linked polyubiquitin chains. Component of the BRCA1-A complex, a complex that specifically recognizes 'Lys-63'-linked ubiquitinated histones H2A and H2AX at DNA lesions sites, leading to target the BRCA1-BARD1 heterodimer to sites of DNA damage at double-strand breaks (DSBs). In the BRCA1-A complex, it specifically removes 'Lys-63'-linked ubiquitin on histones H2A and H2AX, antagonizing the RNF8-dependent ubiquitination at double-strand breaks (DSBs) (PubMed:20656690). Catalytic subunit of the BRISC complex, a multiprotein complex that specifically cleaves 'Lys-63'-linked ubiquitin in various substrates (PubMed:20656690, PubMed:24075985, PubMed:26344097, PubMed:26195665). Mediates the specific 'Lys-63'-specific deubiquitination associated with the COP9 signalosome complex (CSN), via the interaction of the BRISC complex with the CSN complex (PubMed:19214193). The BRISC complex is required for normal mitotic spindle assembly and microtubule attachment to kinetochores via its role in deubiquitinating NUMA1 (PubMed:26195665). Plays a role in interferon signaling via its role in the deubiquitination of the interferon receptor IFNAR1, deubiquitination increases IFNAR1 activity by enhancing its stability and cell surface expression (PubMed:24075985, PubMed:26344097). Down-regulates the response to bacterial lipopolysaccharide (LPS) via its role in IFNAR1 deubiquitination (PubMed:24075985). {ECO:0000269|PubMed:14636569, ECO:0000269|PubMed:16707425, ECO:0000269|PubMed:17525341, ECO:0000269|PubMed:19202061, ECO:0000269|PubMed:19214193, ECO:0000269|PubMed:19261746, ECO:0000269|PubMed:19261748, ECO:0000269|PubMed:19261749, ECO:0000269|PubMed:20656690, ECO:0000269|PubMed:24075985, ECO:0000269|PubMed:26195665, ECO:0000269|PubMed:26344097}.

Molecular Weight: 36.9 kDa Including tag.

UniProt: [P46736](#)

Pathways: [Positive Regulation of Response to DNA Damage Stimulus](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you

Application Details

receive your protein of interest.

Restrictions: For Research Use only

Handling

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| Format: | Liquid |
| Buffer: | 100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer. |
| Handling Advice: | Avoid repeated freeze-thaw cycles. |
| Storage: | -80 °C |
| Storage Comment: | Store at -80°C. |
| Expiry Date: | Unlimited (if stored properly) |

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process