

# Datasheet for ABIN3090060 BIRC2 Protein (AA 1-618) (Strep Tag)

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#### Overview

Quantity:	250 μg
Target:	BIRC2
Protein Characteristics:	AA 1-618
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This BIRC2 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Brand:	AliCE®
Sequence:	MHKTASQRLF PGPSYQNIKS IMEDSTILSD WTNSNKQKMK YDFSCELYRM STYSTFPAGV
	PVSERSLARA GFYYTGVNDK VKCFCCGLML DNWKLGDSPI QKHKQLYPSC SFIQNLVSAS
	LGSTSKNTSP MRNSFAHSLS PTLEHSSLFS GSYSSLSPNP LNSRAVEDIS SSRTNPYSYA
	MSTEEARFLT YHMWPLTFLS PSELARAGFY YIGPGDRVAC FACGGKLSNW EPKDDAMSEH
	RRHFPNCPFL ENSLETLRFS ISNLSMQTHA ARMRTFMYWP SSVPVQPEQL ASAGFYYVGR
	NDDVKCFCCD GGLRCWESGD DPWVEHAKWF PRCEFLIRMK GQEFVDEIQG RYPHLLEQLL
	STSDTTGEEN ADPPIIHFGP GESSSEDAVM MNTPVVKSAL EMGFNRDLVK QTVQSKILTT
	GENYKTVNDI VSALLNAEDE KREEEKEKQA EEMASDDLSL IRKNRMALFQ QLTCVLPILD
	NLLKANVINK QEHDIIKQKT QIPLQARELI DTILVKGNAA ANIFKNCLKE IDSTLYKNLF
	VDKNMKYIPT EDVSGLSLEE QLRRLQEERT CKVCMDKEVS VVFIPCGHLV VCQECAPSLR
	KCPICRGIIK GTVRTFLS

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

#### Characteristics:

#### Key Benefits:

- · Made in Germany from design to production by highly experienced protein experts.
- · Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

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

#### Expression System:

- ALICE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require posttranslational modifications.
- During lysate production, the cell wall and other cellular components that are not required for
  protein production are removed, leaving only the protein production machinery and the
  mitochondria to drive the reaction. During our lysate completion steps, the additional
  components needed for protein production (amino acids, cofactors, etc.) are added to
  produce something that functions like a cell, but without the constraints of a living system all that's needed is the DNA that codes for the desired protein!

#### Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- · The protein's absorbance will be measured against its specific reference buffer.
- · We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade:

custom-made

### **Target Details**

Target:

BIRC2

Alternative Name:

BIRC2 (BIRC2 Products)

Background:

Baculoviral IAP repeat-containing protein 2 (EC 2.3.2.27) (Cellular inhibitor of apoptosis 1) (C-IAP1) (IAP homolog B) (Inhibitor of apoptosis protein 2) (hIAP-2) (hIAP2) (RING finger protein 48) (RING-type E3 ubiquitin transferase BIRC2) (TNFR2-TRAF-signaling complex protein 2),FUNCTION: Multi-functional protein which regulates not only caspases and apoptosis, but also modulates inflammatory signaling and immunity, mitogenic kinase signaling, and cell proliferation, as well as cell invasion and metastasis. Acts as an E3 ubiquitin-protein ligase regulating NF-kappa-B signaling and regulates both canonical and non-canonical NF-kappa-B signaling by acting in opposite directions: acts as a positive regulator of the canonical pathway and suppresses constitutive activation of non-canonical NF-kappa-B signaling. The target proteins for its E3 ubiquitin-protein ligase activity include: RIPK1, RIPK2, RIPK3, RIPK4, CASP3, CASP7, CASP8, TRAF2, DIABLO/SMAC, MAP3K14/NIK, MAP3K5/ASK1, IKBKG/NEMO, IKBKE and MXD1/MAD1. Can also function as an E3 ubiquitin-protein ligase of the NEDD8 conjugation pathway, targeting effector caspases for neddylation and inactivation. Acts as an important regulator of innate immune signaling via regulation of Toll-like receptors (TLRs), Nodlike receptors (NLRs) and RIG-I like receptors (RLRs), collectively referred to as pattern recognition receptors (PRRs). Protects cells from spontaneous formation of the ripoptosome, a large multiprotein complex that has the capability to kill cancer cells in a caspase-dependent and caspaseindependent manner. Suppresses ripoptosome formation by ubiquitinating RIPK1 and CASP8. Can stimulate the transcriptional activity of E2F1. Plays a role in the modulation of the cell cycle. {ECO:0000269|PubMed:15665297, ECO:0000269|PubMed:18082613, ECO:0000269|PubMed:21145488, ECO:0000269|PubMed:21653699, ECO:0000269|PubMed:21931591, ECO:0000269|PubMed:23453969}.

Molecular Weight:

69.9 kDa

UniProt:

Q13490

Pathways:

Apoptosis, Caspase Cascade in Apoptosis, Activation of Innate immune Response, Toll-Like Receptors Cascades

## **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.
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	mitochondria to drive the reaction. During our lysate completion steps, the additional
	components needed for protein production (amino acids, cofactors, etc.) are added to produce
	something that functions like a cell, but without the constraints of a living system - all that's
	needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
	Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months