

Datasheet for ABIN3133791

EPHX2 Protein (AA 1-554) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	EPHX2
Protein Characteristics:	AA 1-554
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This EPHX2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	<p>MALRVAAFDL DGV LALPSIA GAFRRSEEAL ALPRDFLLGA YQTEFPEGPT EQLMKGKITF</p> <p>SQWVPLMDES YRKSSKACGA NLPENFSISQ IFSQAMAARS INRPMLQAAI ALKKKGFTTC</p> <p>IVTNNWLDDG DKRDSL AQMM CELSQHFDFL IESCQVGMIK PEPQIYNFLL DTLKAKPNEV</p> <p>VFLDDFGSNL KPARDMGMVT ILVHNTASAL RELEKVTGTQ FPEAPLPVPC NPNDVSHGYV</p> <p>TVKPGIRLHF VEMGSGPALC LCHGFPESWF SWRYQIPALA QAGFRVLAIK MKGYGDSSSP</p> <p>PEIEEYAMEL LCKEMVTFLD KLGIPQAVFI GHDWAGVMVW NMALFYPERV RAVASLNTPF</p> <p>MPPDPDVSPM KVIRSIPVFN YQLYFQEPGV AEAELEKNMS RTFKSFFRAS DETGFI AVHK</p> <p>ATEIGGILVN TPEDPNLSKI TTEEEIEFYI QQFKKTGFRG PLNWYRNTER NWKWSCKGLG</p> <p>RKILVPALMV TAEKDIVLRP EMSKNMEKWI PFLKRGHIED CGHWTQIEKP TEVNQILIKW</p> <p>LQTEVQNPSV TSKI</p>

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 post-translational 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:	EPHX2
Alternative Name:	Ephx2 (EPHX2 Products)
Background:	<p>Bifunctional epoxide hydrolase 2 [Includes: Cytosolic epoxide hydrolase 2 (CEH) (EC 3.3.2.10) (Epoxide hydratase) (Soluble epoxide hydrolase) (SEH), Lipid-phosphate phosphatase (EC 3.1.3.76)],FUNCTION: Bifunctional enzyme. The C-terminal domain has epoxide hydrolase activity and acts on epoxides (alkene oxides, oxiranes) and arene oxides (PubMed:7840649, PubMed:21217101). Plays a role in xenobiotic metabolism by degrading potentially toxic epoxides (By similarity). Also determines steady-state levels of physiological mediators (By similarity). {ECO:0000250 UniProtKB:P34913, ECO:0000250 UniProtKB:P80299, ECO:0000269 PubMed:21217101, ECO:0000269 PubMed:7840649}., FUNCTION: Bifunctional enzyme. The N-terminal domain has lipid phosphatase activity, with the highest activity towards threo-9,10-phosphonooxy-hydroxy-octadecanoic acid, followed by erythro-9,10-phosphonooxy-hydroxy-octadecanoic acid, 12-phosphonooxy-octadec-9Z-enoic acid and 12-phosphonooxy-octadec-9E-enoic acid (By similarity). Has phosphatase activity toward lyso-glycerophospholipids with also some lower activity toward lysolipids of sphingolipid and isoprenoid phosphates (By similarity). {ECO:0000250 UniProtKB:P34913}.</p>
Molecular Weight:	62.5 kDa
UniProt:	P34914

Application Details

Application Notes:	<p>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.</p>
Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.</p> <p>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!</p>

Application Details

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 Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months