

# Product datasheet

info@arigobio.com

# ARG43572 anti-4E-BP1 phospho (Thr46) antibody

Package: 100 μl Store at: -20°C

### **Summary**

**Product Description** Rabbit Polyclonal antibody recognizes 4E-BP1 phospho (Thr46).

**Tested Reactivity** Hu, Ms

**Tested Application** ICC/IF, IHC-P, IP, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

4E-BP1 **Target Name Species** Human

Immunogen Synthetic Phosphospecific peptide around phospho (Thr46) of Human 4E-BP1.

Conjugation Un-conjugated

**Alternate Names** BP-1; 4EBP1; 4E-BP1; PHAS-I

#### **Application Instructions**

Application table	Application	Dilution
	ICC/IF	1:10 - 1:100
	IHC-P	1:50 - 1:200
	IP	1:10 - 1:50
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

## **Properties**

Form

Purification	Affinity purified.	
Buffer	50 mM Tris-Glycine (pH 7.4), 150 mM NaCl, 0.01% Sodium azide, 40% Glycerol and 0.05% BSA.	
Preservative	0.01% Sodium azide	

Stabilizer 40% Glycerol and 0.05% BSA

Liquid

Concentration Batch dependent

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

#### Bioinformation

Gene Symbol EIF4EBP1

Gene Full Name eukaryotic translation initiation factor 4E binding protein 1

Background This gene encodes one member of a family of translation repressor proteins. The protein directly

interacts with eukaryotic translation initiation factor 4E (eIF4E), which is a limiting component of the multisubunit complex that recruits 40S ribosomal subunits to the 5' end of mRNAs. Interaction of this protein with eIF4E inhibits complex assembly and represses translation. This protein is phosphorylated in response to various signals including UV irradiation and insulin signaling, resulting in its dissociation

from eIF4E and activation of mRNA translation. [provided by RefSeq, Jul 2008]

Function Repressor of translation initiation that regulates EIF4E activity by preventing its assembly into the eIF4F

complex: hypophosphorylated form competes with EIF4G1/EIF4G3 and strongly binds to EIF4E, leading to repress translation. In contrast, hyperphosphorylated form dissociates from EIF4E, allowing interaction between EIF4G1/EIF4G3 and EIF4E, leading to initiation of translation. Mediates the regulation of protein translation by hormones, growth factors and other stimuli that signal through the

MAP kinase and mTORC1 pathways. [UniProt]