

## eIF2alpha elisa kit

eIF2alpha Colorimetric Cell-Based ELISA Kit

CATALOG #  
**AAA315533**

REACTIVITY  
**Human, Mouse, Rat**

### PRODUCT SYNONYMS

eIF2alpha; eIF2alpha Colorimetric Cell-Based ELISA Kit; eIF-2-alpha; EIF-2A; EIF-2alpha; EIF2S1; Eukaryotic translation initiation factor 2 alpha subunit; Eukaryotic translation initiation factor 2 subunit 1; IF2A; eIF2alpha elisa kit

### PRODUCT SPECIFICATIONS

|                         |                                  |
|-------------------------|----------------------------------|
| Reactivity              | Human, Mouse, Rat                |
| Form/Format             | One 96-Well Plate                |
| Sequence Length         | 315                              |
| Reactivity Note         | Human: S52, Mouse: S52, Rat: S52 |
| Detection Method        | Colorimetric 450 nm              |
| Preparation and Storage | Store at 4 degree C.             |

### ADDITIONAL INFORMATION

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| Related Product Information for eIF2alpha elisa kit | <p>Background/Introduction: The Colorimetric Cell-Based ELISA Kit allows for the detection of various target proteins and the effects that certain stimulation conditions have on target protein expression in different cell lines. Qualitative determination of target protein concentration is achieved by an indirect ELISA format. In essence, the target protein is captured by target-specific primary (1 degree) antibodies while the HRP-conjugated secondary (2 degree) antibodies bind the Fc region of the 1 degree antibody. Through this binding, the HRP enzyme conjugated to the 2 degree antibody can catalyze a colorimetric reaction upon substrate addition. Due to the qualitative nature of the Cell-Based ELISA, multiple normalization methods are described: 1) a monoclonal antibody specific for human GAPDH is included to serve as an internal positive control in normalizing the target absorbance values. 2) Following the colorimetric measurement of HRP activity via substrate addition, the Crystal Violet whole-cell staining method is used to determine cell density. After staining, the results can be analyzed by normalizing the absorbance values to cell amounts, by which the plating difference can be adjusted. 3) If a phosphorylated target is being detected, an antibody against the non-phosphorylated counterpart will be provided for normalization purposes. The absorbance values obtained for the non-phosphorylated target can be used to normalize the absorbance values for the phosphorylated target. The eIF2alpha (Phospho-Ser51) Cell-Based ELISA Kit is a convenient, lysate-free, high throughput and sensitive assay kit that can monitor eIF2alpha protein phosphorylation and expression profile in cells. The kit can be used for measuring the relative amounts of phosphorylated eIF2alpha in cultured cells as well as screening for the effects that various treatments, inhibitors (ie. siRNA or chemicals), or activators have on eIF2alpha phosphorylation.</p> |
| Product Categories/Family for eIF2alpha elisa kit   | Cell Based ELISA Kit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

### NCBI AND UNIPROT INFORMATION

|                           |             |
|---------------------------|-------------|
| NCBI GI #                 | 4758256     |
| NCBI GeneID               | 1965        |
| NCBI Accession #          | NP_004085.1 |
| NCBI GenBank Nucleotide # | NM_004094.4 |

|                                  |                                                          |
|----------------------------------|----------------------------------------------------------|
| UniProt Accession #              | <a href="#">P05198</a>                                   |
| Molecular Weight                 | 36112                                                    |
| NCBI Official Full Name          | eukaryotic translation initiation factor 2 subunit 1     |
| NCBI Official Synonym Full Names | eukaryotic translation initiation factor 2 subunit alpha |
| NCBI Official Symbol             | EIF2S1                                                   |
| NCBI Official Synonym Symbols    | EIF2; EIF-2; EIF2A; EIF-2A; EIF-2alpha                   |
| NCBI Protein Information         | eukaryotic translation initiation factor 2 subunit 1     |
| UniProt Protein Name             | Eukaryotic translation initiation factor 2 subunit 1     |
| UniProt Gene Name                | <b>EIF2S1</b>                                            |
| UniProt Synonym Gene Names       | EIF2A; eIF-2-alpha; eIF-2A; eIF-2alpha                   |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | [contact@aaabiotech.com](mailto:contact@aaabiotech.com)  
Online datasheet: <https://www.aaabiotech.com/human-mouse-rat-elisa-kits/eif2alpha/315533>