

# Recombinant Full Length Human EARS2 Protein, GST-tagged

**Cat. No.** EARS2-4132HF    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Human EARS2 full-length ORF ( NP_597708.1, 1 a.a. - 523 a.a.) recombinant protein with GST-tag at N-terminal.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Source</b>           | In Vitro Cell Free System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>ProteinLength</b>    | 523 amino acids                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Description</b>      | This gene encodes a member of the class I family of aminoacyl-tRNA synthetases. These enzymes play a critical role in protein biosynthesis by charging tRNAs with their cognate amino acids. This protein is encoded by the nuclear genome but is likely to be imported to the mitochondrion where it is thought to catalyze the ligation of glutamate to tRNA molecules. Mutations in this gene have been associated with combined oxidative phosphorylation deficiency 12 (COXPD12). Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2015] |
| <b>Molecular Mass</b>   | 85.1 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>AA Sequence</b>      | MAALLRRLQLQERPSAASGRPVGRRANLGTDAVAVRVRFAPSPTGFLHLGGLRT<br>ALYNYIFAKKYQGSFILRLEDTDQTRVVPGAENIEDMLEWAGIPPDESPPRRGGPAG<br>PYQQSQRLLEYAQATEALLKTGAAYPCFCSPQRLELLKKEALRNHQTPRYDNRCRN<br>MSQEQVAQKLAKDPKPAIRFRLEQVVPFQDLVYGWNRHEVASVEGDPVIMKSDG<br>FPTYHLACVDDHHMGISHVLRGSEWLVTAKHLLLYQALGWQPPHFAHLPLLLNR<br>DGSKLSKRQGDVFLEHFAADGFLPDSLDDITNCGSGFAENQMGRITLPELITQFNLT                                                                                                                                                                                                                    |

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QVTCHSALLDLEKLPEFNRLHLQRLVSNESQRRQLVGKLQVLVEEAFGCQLQNRDV  
LNPVYVERILLRQGHICRLQDLVSPVYSYLWTRPAVGRAQLDAISEKVDVIAKRVLG  
LLERSGMSLTQDMLNGELKKLSEGLEGTKYSNVMKLLRMALSGQQGPPVAEMML  
ALGPKEVRERIQKVSS

**Applications**

Enzyme-linked Immunoabsorbent Assay  
Western Blot (Recombinant protein)  
Antibody Production  
Protein Array

**Notes** Best use within three months from the date of receipt of this protein.

**Storage** Store at -80 centigrade. Aliquot to avoid repeated freezing and thawing.

**Storage Buffer** 50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

## GENE INFORMATION

**Gene Name** [EARS2 glutamyl-tRNA synthetase 2, mitochondrial \(putative\) \[ Homo sapiens \]](#)

**Official Symbol** [EARS2](#)

**Synonyms** EARS2; glutamyl-tRNA synthetase 2, mitochondrial (putative); probable glutamate--tRNA ligase, mitochondrial; glutamate tRNA ligase 2; mitochondrial (putative); KIAA1970; MSE1; gluRS; glutamate--tRNA ligase; glutamate tRNA ligase 2, mitochondrial; probable glutamyl-tRNA synthetase, mitochondrial;

**Gene ID** [124454](#)

**mRNA Refseq** [NM\\_001083614](#)

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|                |              |
|----------------|--------------|
| Protein Refseq | NP_001077083 |
| MIM            | 612799       |
| UniProt ID     | Q5JPH6       |

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