

Full-Length

## EMX2 (Human) Recombinant Protein (P01)

Catalog # H00002018-P01

Size 50 ug

### Specification

|                                      |                                                                                                                                                                                                                                                                    |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Description</b>           | Human EMX2 full-length ORF ( NP_004089.1, 1 a.a. - 252 a.a.) recombinant protein with GST-tag at N-terminal.                                                                                                                                                       |
| <b>Sequence</b>                      | MFQPAPKRCFTIESLVAKDSPLPASRSEDPIRPAALSYANSSPINPFLNGFHSAAAAAAGRGVYS<br>NPDLVFAEAVSHPPNPAVPVHPVPPHALAAHPLPSSHSPHPLFASQQRDPSTFYPLIHRYYRL<br>GHRFQGNDTSPEFLLHNALARKPKRIRTAFFSPSLLRLEHAFEKNHYVVGAEKQLAHSLSLTE<br>TQVKVWFQNRRTKFKRQKLEEEGSDSQQKKKGTHINRWRIATKQASPEEIDVTSD |
| <b>Host</b>                          | Wheat Germ (in vitro)                                                                                                                                                                                                                                              |
| <b>Theoretical MW (kDa)</b>          | 54.12                                                                                                                                                                                                                                                              |
| <b>Interspecies Antigen Sequence</b> | Mouse (99); Rat (99)                                                                                                                                                                                                                                               |
| <b>Preparation Method</b>            | <a href="#">in vitro wheat germ expression system</a>                                                                                                                                                                                                              |
| <b>Purification</b>                  | Glutathione Sepharose 4 Fast Flow                                                                                                                                                                                                                                  |
| <b>Storage Buffer</b>                | 50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.                                                                                                                                                                                           |
| <b>Storage Instruction</b>           | Store at -80°C. Aliquot to avoid repeated freezing and thawing.                                                                                                                                                                                                    |
| <b>Note</b>                          | Best use within three months from the date of receipt of this protein.                                                                                                                                                                                             |

### Applications

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

- Protein Array

## Gene Info — EMX2

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| Entrez GeneID       | <a href="#">2018</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| GeneBank Accession# | <a href="#">NM_004098.3</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Protein Accession#  | <a href="#">NP_004089.1</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Gene Name           | EMX2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Gene Alias          | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Gene Description    | empty spiracles homeobox 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Omim ID             | <a href="#">269160 600035</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Gene Ontology       | <a href="#">Hyperlink</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Gene Summary        | <p>This gene encodes a homeobox-containing transcription factor that is the homolog to the 'empty spiracles' gene in Drosophila. Research on this gene in humans has focused on its expression in three tissues: dorsal telencephalon, olfactory neuroepithelium, and urogenital system. It is expressed in the dorsal telencephalon during development in a low rostral-lateral to high caudal-medial gradient and is proposed to pattern the neocortex into defined functional areas. It is also expressed in embryonic and adult olfactory neuroepithelia where it complexes with eukaryotic translation initiation factor 4E (eIF4E) and possibly regulates mRNA transport or translation. In the developing urogenital system, it is expressed in epithelial tissues and is negatively regulated by HOXA10. Alternative splicing results in multiple transcript variants encoding distinct proteins</p> |
| Other Designations  | OTTHUMP00000020578 empty spiracles homolog 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## Disease

- [Cleft Lip](#)
- [Cleft Palate](#)
- [Depressive Disorder](#)
- [Endometriosis](#)
- [Genetic Predisposition to Disease](#)