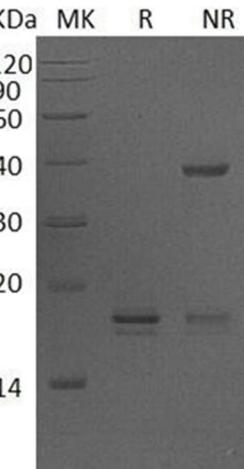


## Recombinant Human AG-2

Catalog No: C424

| <b>Description</b>         | Recombinant Human Anterior Gradient Protein 2 Homolog is produced by our Mammalian expression system and the target gene encoding Arg21-Leu175 is expressed with a 6His tag at the C-terminus.  |      |      |   |    |     |  |  |  |    |  |  |  |    |  |  |  |    |  |  |      |    |  |  |  |    |  |      |  |    |      |  |  |
|----------------------------|---|------|------|---|----|-----|--|--|--|----|--|--|--|----|--|--|--|----|--|--|------|----|--|--|--|----|--|------|--|----|------|--|--|
| <b>Source</b>              | Human Cells   |      |      |   |    |     |  |  |  |    |  |  |  |    |  |  |  |    |  |  |      |    |  |  |  |    |  |      |  |    |      |  |  |
| <b>Alternative name</b>    | Anterior Gradient Protein 2 Homolog; AG-2; hAG-2; HPC8; Secreted Cement Gland Protein XAG-2 Homolog; AGR2; AG2  |      |      |   |    |     |  |  |  |    |  |  |  |    |  |  |  |    |  |  |      |    |  |  |  |    |  |      |  |    |      |  |  |
| <b>Accession No.</b>       | O95994  |      |      |   |    |     |  |  |  |    |  |  |  |    |  |  |  |    |  |  |      |    |  |  |  |    |  |      |  |    |      |  |  |
| <b>Formulation</b>         | Supplied as a 0.2 µm filtered solution of 20mM Tris, 200mM NaCl, 10% Glycerol, pH8.0.   |      |      |   |    |     |  |  |  |    |  |  |  |    |  |  |  |    |  |  |      |    |  |  |  |    |  |      |  |    |      |  |  |
| <b>Quality Control</b>     | Purity: Greater than 95% as determined by reducing SDS-PAGE.<br>Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.  |      |      |   |    |     |  |  |  |    |  |  |  |    |  |  |  |    |  |  |      |    |  |  |  |    |  |      |  |    |      |  |  |
| <b>Shipping</b>            | The product is shipped on dry ice/polar packs.<br>Upon receipt, store it immediately at the temperature listed below.   |      |      |   |    |     |  |  |  |    |  |  |  |    |  |  |  |    |  |  |      |    |  |  |  |    |  |      |  |    |      |  |  |
| <b>Storage</b>             | Store at < -20°C, stable for 6 months after receipt.<br>Please minimize freeze-thaw cycles.   |      |      |   |    |     |  |  |  |    |  |  |  |    |  |  |  |    |  |  |      |    |  |  |  |    |  |      |  |    |      |  |  |
| <b>Amino Acid Sequence</b> | RD <sup>T</sup> V <sup>K</sup> PG <sup>A</sup> KK <sup>D</sup> T <sup>K</sup> DS <sup>R</sup> P <sup>K</sup> L <sup>P</sup> Q <sup>T</sup> L <sup>S</sup> R <sup>G</sup> W <sup>G</sup> D <sup>Q</sup> L <sup>I</sup> WT <sup>Q</sup> T <sup>Y</sup> EE <sup>A</sup> LY <sup>K</sup> S <sup>K</sup> T <sup>S</sup> N <sup>K</sup> P <sup>L</sup> M <sup>I</sup> I <sup>H</sup> H <sup>L</sup> D <sup>E</sup> C <sup>P</sup> H <sup>S</sup> Q <sup>A</sup> L <sup>K</sup><br>KV <sup>F</sup> A <sup>E</sup> N <sup>K</sup> E <sup>I</sup> Q <sup>K</sup> L <sup>A</sup> E <sup>Q</sup> F <sup>K</sup><br>V <sup>L</sup> L <sup>N</sup> L <sup>V</sup> Y <sup>E</sup> T <sup>T</sup> D <sup>K</sup> H <sup>L</sup> S <sup>P</sup> D <sup>G</sup> Q <sup>Y</sup> V <sup>P</sup> R <sup>I</sup> M <sup>F</sup> V <sup>D</sup> P <sup>S</sup> L <sup>T</sup> V <sup>R</sup> A <sup>D</sup> I <sup>T</sup> G <sup>R</sup> Y <sup>S</sup> N <sup>R</sup> L <sup>Y</sup> A <sup>Y</sup> E <sup>P</sup> A <sup>D</sup> T <sup>A</sup> L <sup>L</sup> D <sup>N</sup> M <sup>K</sup> K <sup>A</sup> L <sup>K</sup> L <sup>K</sup> T <sup>E</sup><br>ELVDHHHHHH |      |      |   |    |     |  |  |  |    |  |  |  |    |  |  |  |    |  |  |      |    |  |  |  |    |  |      |  |    |      |  |  |
| <b>Background</b>          | Anterior Gradient 2 (AGR2) is an 18-21 kDa member of the PDI family of enzymes. AGR2 is widely expressed in secretory cells, such as small intestine goblet, prostate epithelium, enteroendocrine cells, and multiple carcinoma cell types. AGR2 forms transient disulfide linkages with molecules destined for secretion, possibly aiding protein folding. Expression of AGR2 shows a positive correlation with expression of estrogen receptor in breast carcinoma and a negative correlation with expression of EGF receptor. Mature human AGR2 is 155 amino acids (aa) in length (aa 21 - 175). Cys81 is presumed to participate in intermolecular bond formation. Over aa 21 - 175, human AGR2 shares 94% aa identity with mouse AGR2.   |      |      |   |    |     |  |  |  |    |  |  |  |    |  |  |  |    |  |  |      |    |  |  |  |    |  |      |  |    |      |  |  |
| <b>SDS-Page</b>            | <table border="1"> <thead> <tr> <th>KDa</th> <th>MK</th> <th>R</th> <th>NR</th> </tr> </thead> <tbody> <tr> <td>120</td> <td></td> <td></td> <td></td> </tr> <tr> <td>90</td> <td></td> <td></td> <td></td> </tr> <tr> <td>60</td> <td></td> <td></td> <td></td> </tr> <tr> <td>40</td> <td></td> <td></td> <td>band</td> </tr> <tr> <td>30</td> <td></td> <td></td> <td></td> </tr> <tr> <td>20</td> <td></td> <td>band</td> <td></td> </tr> <tr> <td>14</td> <td>band</td> <td></td> <td></td> </tr> </tbody> </table>   | KDa  | MK   | R | NR | 120 |  |  |  | 90 |  |  |  | 60 |  |  |  | 40 |  |  | band | 30 |  |  |  | 20 |  | band |  | 14 | band |  |  |
| KDa                        | MK  | R    | NR   |   |    |     |  |  |  |    |  |  |  |    |  |  |  |    |  |  |      |    |  |  |  |    |  |      |  |    |      |  |  |
| 120                        |   |      |      |   |    |     |  |  |  |    |  |  |  |    |  |  |  |    |  |  |      |    |  |  |  |    |  |      |  |    |      |  |  |
| 90                         |   |      |      |   |    |     |  |  |  |    |  |  |  |    |  |  |  |    |  |  |      |    |  |  |  |    |  |      |  |    |      |  |  |
| 60                         |   |      |      |   |    |     |  |  |  |    |  |  |  |    |  |  |  |    |  |  |      |    |  |  |  |    |  |      |  |    |      |  |  |
| 40                         |   |      | band |   |    |     |  |  |  |    |  |  |  |    |  |  |  |    |  |  |      |    |  |  |  |    |  |      |  |    |      |  |  |
| 30                         |   |      |      |   |    |     |  |  |  |    |  |  |  |    |  |  |  |    |  |  |      |    |  |  |  |    |  |      |  |    |      |  |  |
| 20                         |   | band |      |   |    |     |  |  |  |    |  |  |  |    |  |  |  |    |  |  |      |    |  |  |  |    |  |      |  |    |      |  |  |
| 14                         | band  |      |      |   |    |     |  |  |  |    |  |  |  |    |  |  |  |    |  |  |      |    |  |  |  |    |  |      |  |    |      |  |  |