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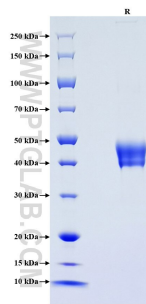
# Recombinant Rat ACVR1 protein (rFc Tag)



Catalog Number: Eg3420

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|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Basic Information                                                                        | Species:<br>Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Purity:<br>>90 %, SDS-PAGE                                                                                                        | Tag:<br>rFc Tag |
| Technical Specifications                                                                 | <p><b>Purity:</b><br/>&gt;90 %, SDS-PAGE</p> <p><b>Endotoxin Level:</b><br/>&lt;0.1 EU/μg protein, LAL method</p> <p><b>Source:</b><br/>HEK293-derived Rat ACVR1 protein Met21-Glu123 (Accession# P80201) with a rabbit IgG Fc tag at the C-terminus.</p> <p><b>GeneID:</b><br/>79558</p> <p><b>Accession:</b><br/>P80201</p> <p><b>Predicted Molecular Mass:</b><br/>37.8 kDa</p> <p><b>SDS-PAGE:</b><br/>39-49 kDa, reducing (R) conditions</p> <p><b>Formulation:</b><br/>Lyophilized from 0.22 μm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.</p> |                                                                                                                                   |                 |
| Biological Activity                                                                      | Not tested                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                   |                 |
| Storage and Shipping                                                                     | <p><b>Storage:</b><br/>It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"><li>• Until expiry date, -20°C to -80°C as lyophilized proteins.</li><li>• 3 months, -20°C to -80°C under sterile conditions after reconstitution.</li></ul> <p><b>Shipping:</b><br/>The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.</p>                                                                                                                                                   |                                                                                                                                   |                 |
| Reconstitution                                                                           | Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                   |                 |
| Background                                                                               | Activin A receptor type I (ACVR1) is a transmembrane serine/threonine kinase and belongs to the transforming growth factor-β superfamily. It is involved in a wide variety of biological processes, including bone, heart, cartilage, nervous, and reproductive system development and regulation. ACVR1 plays an important role in hematopoiesis and anemia via the BMP6/ACVR1/SMAD pathway, which regulates expression of hepcidin, the master regulator of iron homeostasis.                                                                                                                                                   |                                                                                                                                   |                 |
| References                                                                               | <p>1.Valer JA. et al. (2019) Cells. 8(11):1366.</p> <p>2.Nagar G. et al. (2023) Brief Funct Genomics. 22(2):123-142.</p> <p>3.Duminuco A. et al. (2023) Cancers (Basel). 16(1):154.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                   |                 |
| Synonyms                                                                                 | Activin receptor type I, Activin receptor type-1, ACTR-I, Acvrlk2, EC:2.7.11.30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                   |                 |
| For technical support and original validation data for this product please contact       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                   |                 |
| T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | E: proteintech@ptglab.com<br>W: ptglab.com                                                                                        |                 |
|                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer. |                 |

## Selected Validation Data



Purity of Recombinant Rat ACVR1 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) conditions and stained using Coomassie blue.