

Canine BMPR1A/ALK-3 Protein



Cat. No. ALK-DM201

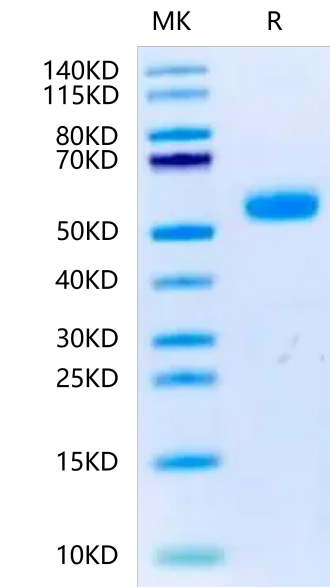
Description	
Source	Recombinant Canine BMPR1A/ALK-3 Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Gln24-Arg152.
Accession	NP_001138622.1
Molecular Weight	The protein has a predicted MW of 40.94 kDa. Due to glycosylation, the protein migrates to 50-65 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage	
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background	
The type IA bone morphogenetic protein receptor (Bmpr1a), encoded by 11 exons and spanning about 40 kb on chromosome 14 in mice and chromosome 10 in human (Derynck & Feng, 1997; Mishina, Hanks, Miura, Tallquist, & Behringer, 2002), is an essential receptor for BMP signaling.	

Assay Data

Bis-Tris PAGE



Canine BMPR1A on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

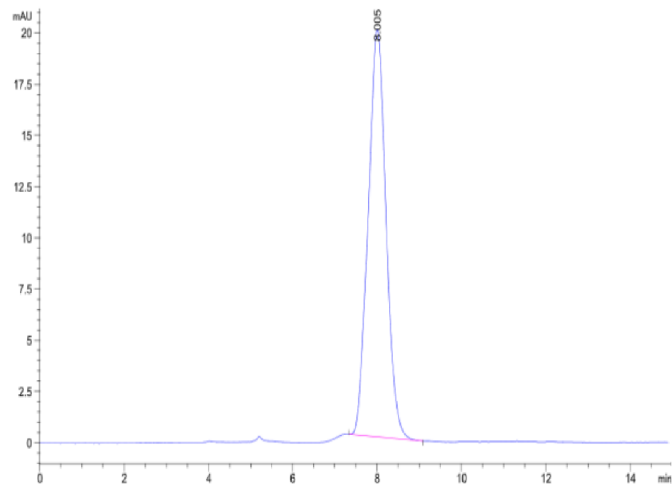
SEC-HPLC

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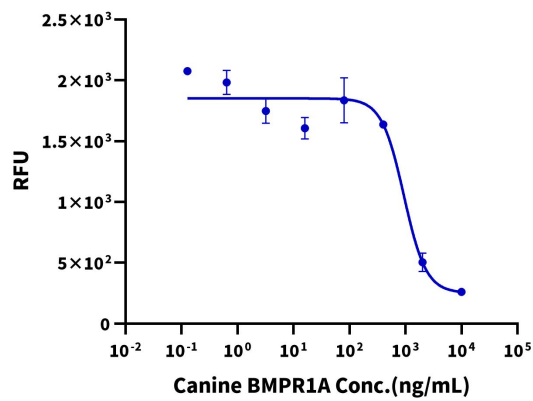
Assay Data



The purity of Canine BMPR1A is greater than 95% as determined by SEC-HPLC.

Cell Based Assay

Recombinant Canine BMPR1A Bioactivity



Measured by its ability to inhibit rhBMP4-induced alkaline phosphatase production by ATDC5 cells. The ED50 for this effect is typically 0.5 - 2.5 µg/mL in the presence of 50 ng/mL of recombinant human BMP4.