

## Recombinant Exendin-4

<b>Catalog No.</b>	CRE117A CRE117B CRE117C	<b>Quantity:</b>	20 µg 100 µg 1.0 mg
<b>Alternate Names:</b>	Exendin-4, Exenatide, Byetta, Bydureon		
<b>Description:</b>	<p>Exendin-4 mimics the incretin hormone glucagon-like peptide 1 (GLP-1) and shares 53% sequence homology with GLP-1 (aa 7-36) amide. Interacts with the same membrane receptor, GLP1R, and induces hypotension that is mediated by relaxation of cardiac smooth muscle.</p> <p>The native hormone is produced in the gut of Gila monster <i>Heloderma suspectum</i> that stimulates insulin production without causing threateningly low blood sugar, which can occur after using some anti-diabetes products. Researchers used extracted saliva from Gila monsters to create an unprecedented breakthrough in Type 2 diabetes treatment. Unlike other products taken for type 2 diabetes, Exendin-4 has not been linked with weight gain and actually resulted in weight loss, according to the researchers. Exendin-4 enhances glucose-dependent insulin secretion, suppresses inappropriately elevated secretion and slows gastric emptying <i>in vivo</i>. It also promotes B-cell proliferation and neogenesis <i>in vitro</i> and in animal models. Exendin-4 stimulates an increase in acinar cAMP, without stimulating the release of amylase.</p>		
<b>UniProt ID:</b>	P26349		
<b>Source:</b>	<i>E. coli</i>		
<b>Molecular Weight:</b>	4186.7 (39 aa)		
<b>Formulation:</b>	Lyophilized from sterile filtered 20 mM PBS, 4% mannitol		
<b>Purity:</b>	> 95.0% by SDS PAGE and RP-HPLC		
<b>Biological Activity:</b>	<ol style="list-style-type: none"> <li>1. Regulates Glucose levels rapidly</li> <li>2. Reduces Insulin resistance</li> <li>3. Reduces Glucagon</li> <li>4. Reduces HbA1c</li> <li>5. Stimulates beta cell growth which stimulates insulin production</li> </ol>		
<b>Amino Acid Sequence:</b>	HGEGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPS		
<b>Reconstitution:</b>	<b>Centrifuge vial prior to opening.</b> Add sterile distilled water at a concentration of 0.1 to 1.0 mg/ml. After complete solubilization of the protein, it can be further diluted to other aqueous solutions.		
<b>Storage &amp; Stability:</b>	<p>Upon receipt, store at -20°C to -80°C for up to 1 year. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, prepare aliquots with a carrier protein and store at -20°C to -80°C.</p> <p><b>Avoid repeated freeze/thaw cycles.</b></p>		

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