

## Certificate of Analysis (CoA)

**Recombinant Murine Leptin**  
**Animal-Free manufactured****Catalog#** AF-450-31**Lot#** 0415AFC76**Source:** *E.coli***Expiration Date:** December 2027**Manufacturing Site:** Westlake Village, CA, USA**Synonyms:** Obesity protein (OB)**Description:** Encoded by the *ob* (*obese*) gene, Leptin is an adipose-derived cytokine that suppresses appetite and increases thermogenesis. Leptin exerts its anorectic effect via signaling through a hypothalamic receptor termed OB-R. Leptin has been shown to reduce body weight, food consumption, and plasma glucose levels in various *in vivo* models. Recombinant Murine Leptin is a 16.2 kDa protein containing 147 amino acid residues.**Sequence:** MVPIQKVQDD TKTLIKTIIVT RINDISHTQS VSAKQRTGL DFIPGLHPIL SLSKMDQTLA VYQQVLTSIP SQNVLQIAND  
LENLRDLLHL LAFSKSCSLP QTSGLQKPES LDGVLEASLY STEVVALSRL QGSLQDILQQ LDVSPEC**Storage & Handling:****Handling:** Centrifuge vial prior to opening. Do not vortex after reconstitution. Avoid repeated freeze-thaw cycles.**Reconstitution:** Initially reconstitute in water to 0.1-1.0mg/ml Store at 2°C to 8°C for up to 1 week or prepare for extended storage.**Extended Storage:** After initial reconstitution, further dilute in a buffer containing a carrier protein or stabilizer (e.g. 5% Trehalose). Store working aliquots at -20°C to -80°C.

Storage/Stability:	Product Form	Temperature	Storage Time
	Lyophilized	-20°C to -80°C	December 2027
	Lyophilized	4°C	6 months
	Lyophilized	Room Temperature	1 month
	Reconstituted	2°C to 8°C	1 week
	Extended Storage	-20°C to -80°C	3 months

**Specifications:****Formulation:** Sterile filtered through a 0.2-micron filter. Lyophilized from 0.1% TFA.**Authenticity:** Verified by N-terminal and Mass Spectrometry analyses (when applicable).**Purity:** ≥ 98% by SDS-PAGE gel and HPLC analyses.**Endotoxin:** Endotoxin level is < 0.01 ng/μg of protein (< 0.1 EU/μg).**Protein Content:** Verified by UV Spectroscopy and/or SDS-PAGE gel.**Biological Activity:** Not available.**Usage:** Not for human use.

Country of Origin: USA



Quality Assurance Representative