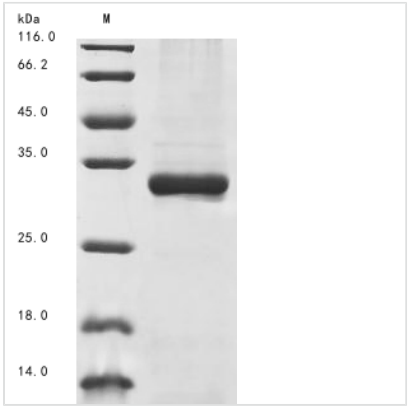
Recombinant Macaca mulatta Uncharacterized protein (OSM)

Product Code	CSB-BP2949MOW
Abbreviation	Recombinant Rhesus macaque OSM protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	F7GF43
Product Type	Recombinant Proteins
Immunogen Species	Macaca mulatta (Rhesus macaque)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	MASMAAMGSCSKEYRMLLGQLQKQTDLMQDTSRLLDPYIRIQGLDIPKLREHC RESPGAFPSEETLRGLGRRGFLQTLNATLGRVLHRLADLEQHLPKAQDLERS GLNIEDLEKLQMARPNVLGLRNNVYCMAQLLDNSDMTEPTKAGRGTPQPPTP TPTSDVFQRKLEGCSFLRGYHRFMHSVGRVFSKWGESPNRSRRHSPHQALR KGVRRTRPSRKGNRLMPRGQLPR
Research Area	Immunology
Source	Baculovirus
Target Names	OSM
Expression Region	1-231aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged
Mol. Weight	28.8
Protein Length	Full Length
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Recombinant Macaca mulatta Oncostatin M (OSM) is produced using a baculovirus expression system and contains the 22-252 amino acid region of the protein. The partial protein carries an N-terminal 10xHistidine tag, which helps with purification and detection processes. SDS-PAGE analysis confirms the product achieves over 85% purity, though this may vary slightly between batches. Endotoxin levels have been reduced to accommodate most experimental requirements.

Oncostatin M (OSM) appears to be a cytokine that regulates several cellular processes, particularly growth and differentiation. The protein seems to play an important role in immune response and inflammatory pathways. Because of its involvement in these biological processes, OSM has become a valuable research tool for studying cytokine signaling mechanisms and immune-related disorders, potentially offering insights into regulatory pathways that aren't fully understood yet.

Potential Applications

Note: The applications listed below are based on what we know about this protein's biological functions, published research, and experience from experts in the field. However, we haven't fully tested all of these applications ourselves yet. We'd recommend running some preliminary tests first to make sure they work for your specific research goals.

1. Protein-Protein Interaction Studies

Researchers can use this recombinant Macaca mulatta OSM to explore protein-protein interactions with possible receptor proteins or binding partners in non-human primate cellular systems. The N-terminal 10xHis tag allows for protein purification and immobilization in pull-down assays or surface plasmon resonance experiments. Scientists may study binding kinetics and measure affinity while identifying novel interacting proteins using this purified OSM protein as bait in biochemical assays.

2. Antibody Development and Validation

This recombinant OSM protein works well as an antigen for creating and testing antibodies specific to Macaca mulatta OSM. The relatively high purity (>85%) and clearly defined expression region (22-252aa) make it appropriate for immunization protocols and antibody screening assays that follow. The His-tag simplifies protein immobilization in ELISA-based screening and helps characterize antibody specificity and cross-reactivity patterns.

3. Comparative Evolutionary Studies

Scientists can apply this Macaca mulatta OSM in comparative studies examining protein structure and function across primate species. Biochemical comparisons with human or other primate OSM orthologs may help researchers understand evolutionary conservation and points of divergence. Since the baculovirus expression system provides proper eukaryotic protein folding, it

appears suitable for structural studies and cross-species functional comparisons.

4. Cell Culture Research Applications

The recombinant OSM protein serves as a research tool in non-human primate cell culture studies examining cellular responses and signaling pathways. Scientists can add this purified protein to Macaca mulatta-derived cell lines to study dose-response relationships and observe cellular phenotypic changes. The defined protein concentration and purity levels should enable reproducible experimental conditions for in vitro cellular assays, though results may still show some variation depending on specific experimental conditions.

Shelf Life

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