

DESCRIPTION

Source	Chinese Hamster Ovary cell line, CHO-derived cynomolgus monkey IL-18 BPa protein Thr28-Arg207, with a C-terminal 6-His tag Accession # XP015290916.1
N-terminal Sequence Analysis	Thr28
Structure / Form	Monomer
Predicted Molecular Mass	20 kDa

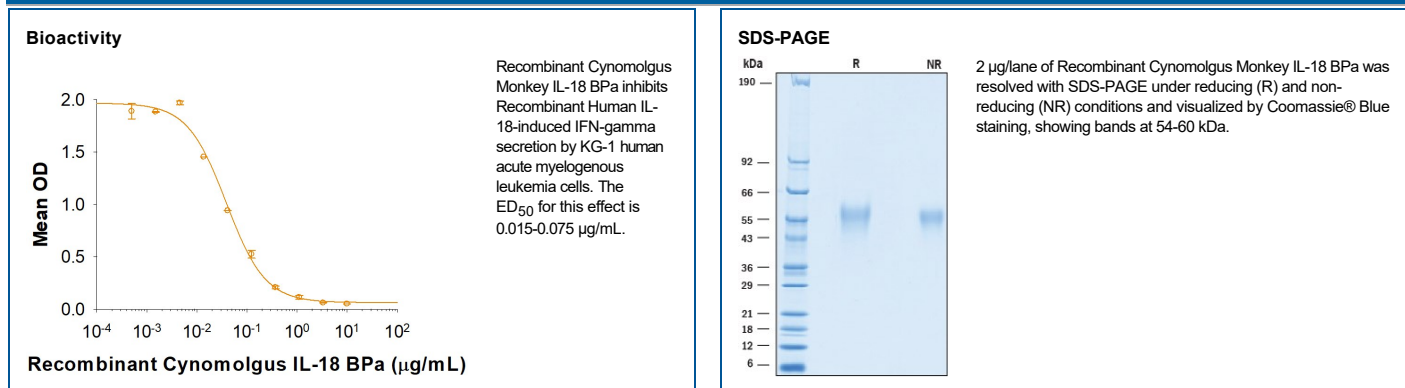
SPECIFICATIONS

SDS-PAGE	54-60 kDa, reducing conditions
Activity	Measured by its ability to inhibit the IL-18-induced response of KG-1 human acute myelogenous leukemia cells. The ED ₅₀ for this effect is 0.015-0.075 µg/mL
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 500 µg/mL in PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 3 months, -20 to -70 °C under sterile conditions after reconstitution.

DATA



BACKGROUND

Cynomolgus Interleukin 18 binding protein (IL-18 BP) is a 20 kDa secreted glycoprotein, which functions as an IL-18 antagonist by binding to IL-18 and blocking its biological activity (1). IL-18 BP bears no amino acid sequence homology to the membrane-associated IL-18 and IL-1 receptor proteins. Human IL-18BP encodes for at least four isoforms by alternative splicing. The IL-18 BP isoform a and c each contains one immunoglobulin (Ig)-like C2-type domain while isoform b and d lack a complete Ig domain. The complete Ig domain has been shown to be essential to the binding and neutralizing properties of the binding proteins (2). Cynomolgus IL-18BP shares 83% sequence identity with human and 62% with mouse IL-18BP, respectively. Several poxviruses also encode proteins with sequence similarity to IL-18 BP. Viral IL-18 BPs have been shown to bind and inhibit IL-18 responses and may be involved in modulating host immune responses. The expression of IL-18 BP is markedly upregulated by IFN-gamma, suggesting that IL-18 activity is modulated by a negative feedback mechanism mediated by IL-18 BP (3).

References:

1. Mühl, H. *et al.* (2000) *Biochem. Biophys. Res. Commun.* **267**:960.
2. Kim, S-H. *et al.* (2000) *Proc. Nat. Acad. Sci. USA* **97**:1190.
3. Calderara, S. *et al.* (2001) *Virology* **279**:22.