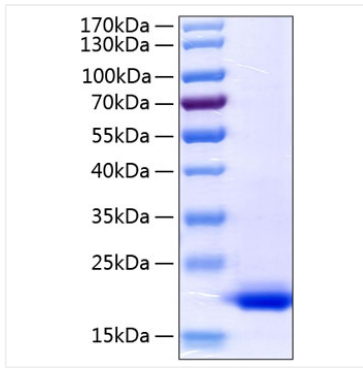
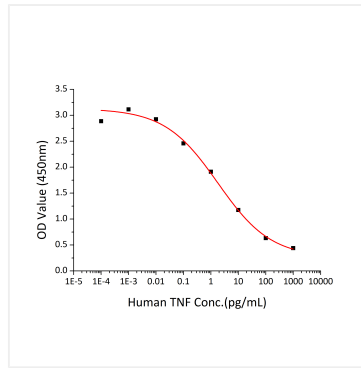




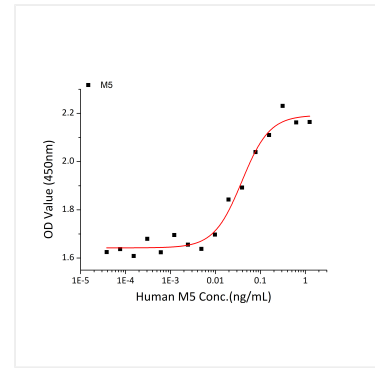
## Validation Data



Recombinant Human TNF-alpha Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Recombinant Human TNF-alpha induces cytotoxicity in the L-929 mouse fibroblast cells in the presence of the metabolic inhibitor actinomycin D. The ED<sub>50</sub> for this effect is 0.90-3.60 ng/mL, corresponding to a specific activity of  $2.78 \times 10^5$ ~ $1.11 \times 10^6$  units/mg.



At concentrations ranging from 0.01 to 5 ng/mL, M5 factor (RP03505 IL1A, RP00212 IL17A, RP01616 IL22, RP00993 TNF $\alpha$ , RP00054 OSM) promotes the proliferation of HaCaT cells.