

Version 1.1

Update: 12/27/2019

## CERTIFICATE OF ANALYSIS

### Product Information

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Product Name:	TNF- $\alpha$ , Porcine
Cat. No.:	Z03338
Lot No.:	P50102005
Storage Condition:	Lyophilized recombinant Porcine Tumor Necrosis Factor-alpha (rpTNF- $\alpha$ ) remains stable up to 6 months at lower than -70°C from date of receipt. Upon recons titution, rpTNF- $\alpha$ should be stable up to 1 week at 4°C or up to 3 months at -20°C.

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### Quality Results

Test Items	Specifications	Results
Physical Appearance	White Freeze-dried Powder	Conformed
Purity (SDS-PAGE)	> 98%	Conformed
Biological Activity(ED <sub>50</sub> )	< 20 ng/ml	Conformed
Molecular Weight	17.2 kDa	Conformed
Bacterial Endotoxin	< 0.2 EU/ $\mu$ g	Conformed

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### Caution:

For laboratory use only. Not for household use. If you have any questions about the Certificate of Analysis, please contact our customer service representative at 1-877-436-7274 (Toll-Free), or 1-732-885-9188

Certified by: *Xianli Yang*

Date: 05/26/2020

Quality Department

*For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.*