



# HMGB1 Products



Lipopolysaccharide (LPS) may play an important pathogenic role in triggering and exacerbating chronic inflammatory autoimmune diseases. High Mobility Group Box 1 (HMGB1), a late-stage lethal mediator of LPS, is a known pro-inflammatory cytokine which stimulates release of other cytokines such as TNF- $\alpha$  and IL-6 through Toll-like receptor 4 (TLR4). Because TLR4 is a receptor for LPS, it is assumed that LPS and HMGB1 play a synergistic role in chronic inflammatory diseases. HMGB1 is currently considered an important target molecule for developing new therapeutics.

## Bovine HMGB1 (Catalog # 9050), 1 mg/ml x 0.1 ml

HMGB1 was purified from bovine thymus. Pro-inflammatory cytokine activity was confirmed by TNF- $\alpha$  release from RAW 264.7 cells incubated with HMGB1 for 16 hours.

## HMGB1 Detection ELISA Kit (Catalog # 6010)

**Standard Range:** 0.8 - 50 ng/ml

### Reproducibility:

Species	Intra-Assay CV (%)	Inter-Assay CV (%)
Human	2.7 - 3.6	1.3 - 5.1
Mouse	1.4 - 8.1	0.9 - 4.5

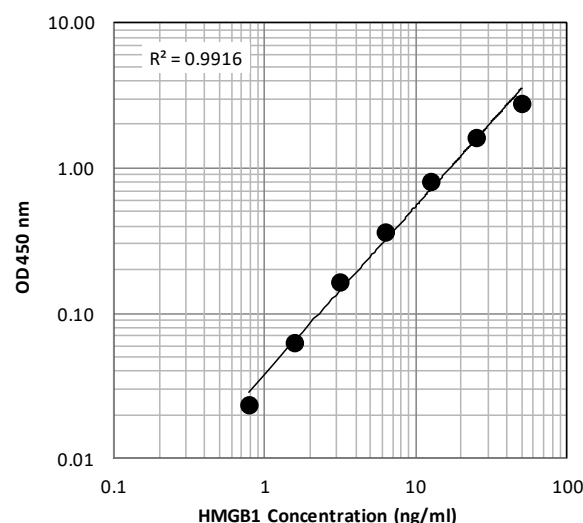
### Recovery:

Species	Averaged Recovery Results
Human (5 sera)	101 +/- 25.1%
Mouse (5 sera)	104 +/- 8.3%

### Specificity:

Average cross-reactivity to bovine HMGB2 is 12.4%

## Standard Curve



## Anti-HMGB1 Mouse Antibodies (1 mg/ml x 0.1 ml)

Type	Product	Catalog #
Monoclonal	Anti-HMGB1 Peptide (2-11) Antibody, Clone 1-1.2BP1	7032
	Anti-HMGB1 Peptide (2-11) Antibody, Clone 1-2.5AP	7033
	Anti-HMGB1 Peptide (2-11) Antibody, Clone 1-3.10EP1	7034
	Anti-HMGB1 Peptide (166-176) Antibody, Clone 1-1.2.11.P2	7037
	Anti-Bovine HMGB1 Antibody, Clone 1-37.10FH	7047
Polyclonal	Anti-Bovine HMGB1 Rabbit Antibodies	7028
	Anti-HMGB1 Peptide (2-11) Rabbit Antibodies	7029
	Anti-HMGB1 Peptide (166-176) Rabbit Antibodies	7030
	Anti-Bovine HMGB1 IgY Antibodies	7064

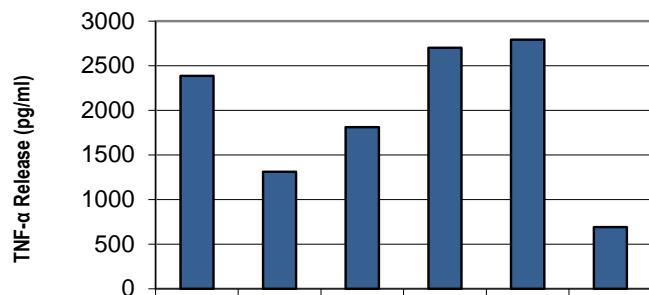
Chondrex, Inc. also provides mouse and human cytokine ELISA kits (TNF- $\alpha$ , IL-4, IL-6, etc.) for assaying HMGB1 biological activity. For more information, please contact Chondrex, Inc. at [support@chondrex.com](mailto:support@chondrex.com).



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## Anti-HMGB1 mAb (Cat # 7034) inhibits TNF- $\alpha$ release by HMGB1 from RAW 264.7 Cells

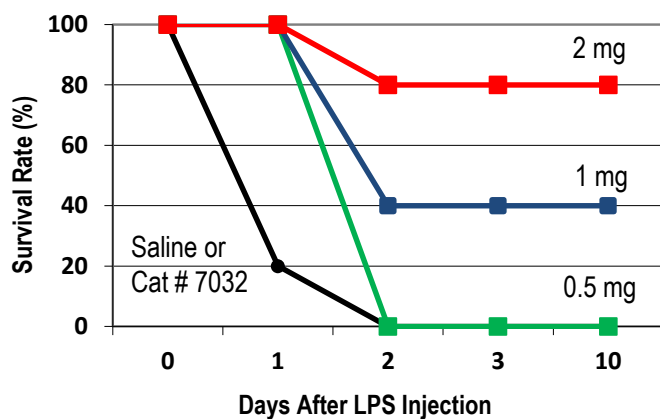


HMGB1	1	1	1	1	1	-
Cat # 7034	-	5	2.5	1	-	-
Cat # 7032	-	-	-	-	5	-

(μg/ml)

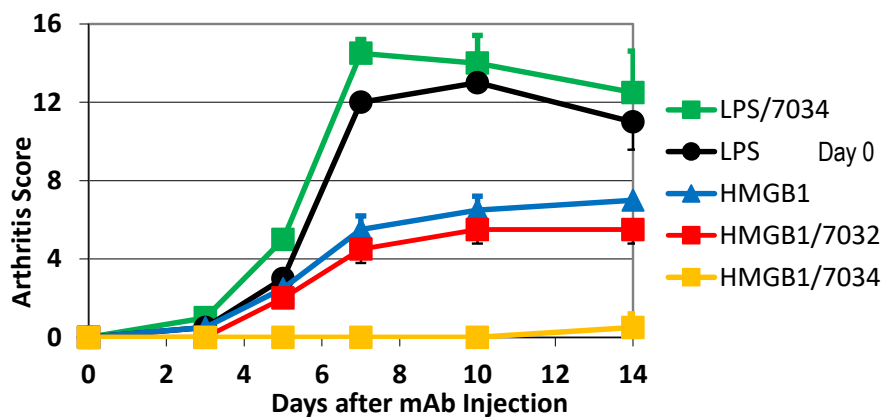
Mouse RAW cells in OPTI serum free media  
↓  
Add bovine HMGB1 and anti-HMGB1 mAbs  
↓  
Incubate at 37°C for 16 hours  
↓  
Assay for TNF- $\alpha$  levels in culture media

## Anti-HMGB1 mAb (Cat # 7034) Prevents LPS Lethality in BALB/c Mice



BALB/c mice (8 weeks old, males)  
↓  
Day 0: IP injection of each dose of mAb  
↓  
2 hours later: IP injection of 0.5 mg LPS  
↓  
Observe mice every day until day 10

## Anti-HMGB1 mAb (Cat # 7034) Suppresses CAIA Induction by HMGB1 in DBA/1 Mice



DBA/1 mice (8 weeks old, males)  
↓  
Day 0: IP injection of 1.5 mg 5-clone cocktail (Cat # 53010)  
↓  
Day 1: IP injection of 5 mg anti-HMGB1 mAb  
↓  
Day 3: IP injection of 50 μg LPS or 500 μg bovine HMGB1 (Cat # 9050)  
↓  
Observe mice every day until day 14