



Rabbit Anti-HMGB1 antibody

SL0664R

Product Name:	HMGB1
Chinese Name:	高迁移率族蛋白B1抗体
Alias:	Amphoterin; High mobility group 1; High Mobility Group Box 1; High mobility group protein 1; High mobility group protein B1; HMG3; HMGB 1;HMGB-1; Hmgb1 protein; Nonhistone chromosomal protein HMG1; SBP 1; SBP-1; Sulfoglucuronyl carbohydrate binding protein; HMGB1 HUMAN.
文献引用 	<p>Specific References(7) SL0664R has been referenced in 7 publications.</p> <p>[IF=3.24]Zhao, Lu, et al. "The high mobility group box 1 protein of <i>Sciaenops ocellatus</i> is a secreted cytokine that stimulates macrophage activation." <i>Developmental & Comparative Immunology</i> 35.10 (2011): 1052-1058.WB; PubMed:21527276</p> <p>[IF=3.12]Jiang, W., et al. "Curculigoside A attenuates experimental cerebral ischemia injury <i>in vitro</i> and <i>in vivo</i>." <i>Neuroscience</i> 192 (2011): 572-579.WB;Rat. PubMed:21756977</p> <p>[IF=3.05]Rui, Zhang, et al. "Omega-3 polyunsaturated fatty acids inhibit the increase in cytokines and chemotactic factors induced <i>in vitro</i> by lymph fluid from an intestinal ischemia-reperfusion injury model." <i>Nutrition</i> (2014).WB;Rat. PubMed:25701342</p> <p>[IF=0.94]Wang, Xin?Jun, et al. "Clinical and prognostic significance of high-mobility group box-1 in human gliomas." <i>Experimental and Therapeutic Medicine</i>.WB;Human. PubMed:not posted yet</p> <p>[IF=1.34]Sun, Shanping, et al. "High mobility group box-1 and its clinical value in breast cancer." <i>OncoTargets and Therapy</i> 8 (2015): 413.IHC-P;Human.</p>

	<p style="text-align: right;">PubMed:25709474</p> <p>[IF=2.61]Li, Yuan-bo, et al. "Methotrexate affects HMGB1 expression in rheumatoid arthritis, and the downregulation of HMGB1 prevents rheumatoid arthritis progression." Molecular and Cellular Biochemistry: 1-10.Human.</p> <p style="text-align: right;">PubMed:27522665</p> <p>[IF=2.35]Li, Guofu, et al. "The neutrophil elastase inhibitor, sivelestat, attenuates sepsis-related kidney injury in rats." International Journal of Molecular Medicine 38.3 (2016): 767-775.WB;Rat.</p> <p style="text-align: right;">PubMed:27430552</p>
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/TestIF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	25kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human HMGB1:75-170/215
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	<p>High Mobility Group Box-1 (HMGB1) is a cytokine implicated in the pathogenesis of rheumatoid arthritis (RA) and other inflammatory diseases. The cholinergic anti-inflammatory pathway, a vagus nerve dependent mechanism, inhibits HMGB1 release in experimental disease models</p> <p>Function: DNA binding proteins that associates with chromatin and has the ability to bend DNA. Binds preferentially single-stranded DNA. Involved in V(D)J recombination by acting as a cofactor of the RAG complex. Acts by stimulating cleavage and RAG protein binding at the 23 bp spacer of conserved recombination signal sequences (RSS). Heparin-binding protein that has a role in the extension of neurite-type cytoplasmic processes in developing cells.</p>

Subunit:

Component of the RAG complex composed of core components RAG1 and RAG2, and associated component HMGB1 or HMGB2.

Subcellular Location:

Nucleus. Chromosome.

Similarity:

Belongs to the HMGB family.
Contains 2 HMG box DNA-binding domains.

SWISS:

P09429

Gene ID:

3146

Database links:

[Entrez Gene: 282691](#)Cow

[Entrez Gene: 3146](#)Human

[Entrez Gene: 100862258](#)Mouse

[Entrez Gene: 15289](#)Mouse

[Entrez Gene: 25459](#)Rat

[Omim: 163905](#)Human

[SwissProt: P10103](#)Cow

[SwissProt: P09429](#)Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

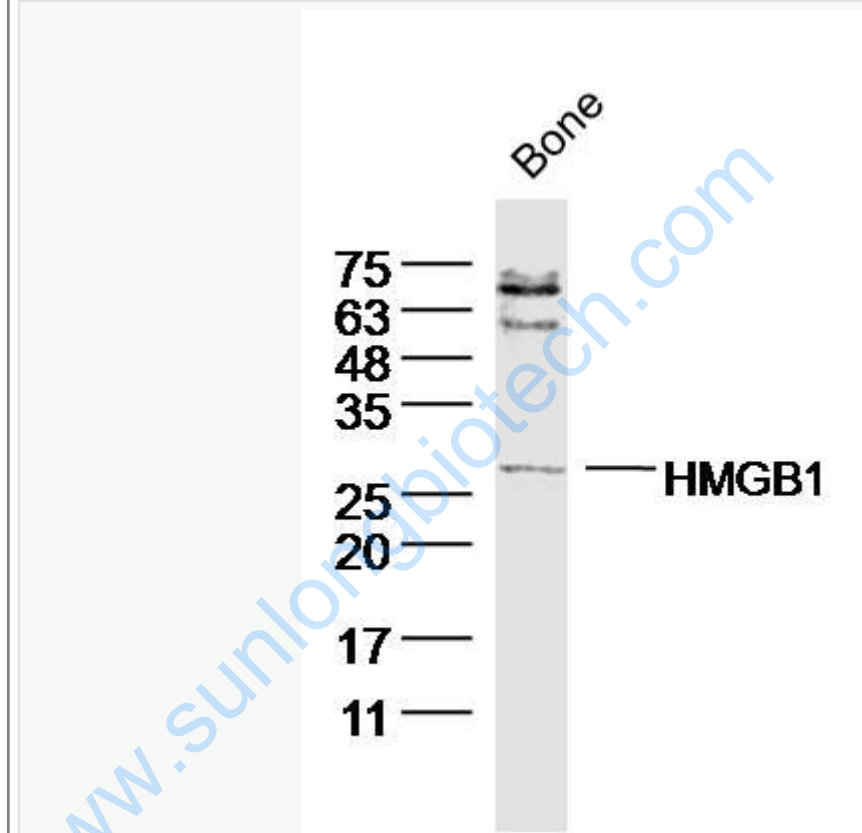
近来的研究表明称之为高迁移率族蛋白B-1 (HMG-B1)的核内结构蛋白在核外表达时是一种有效的早期炎症介质。

高迁移性B1组蛋白(HMGB1): 是一种核Binding protein, 在DNA重组、修复、复制和基因转录中起作用。HMGB1也是巨噬细胞分泌的一种介质。

此外, 高迁移性B1组蛋白亦被受刺激的巨噬细胞或单核细胞主动分泌。在这一主动分泌过程中, HMGB1首先经乙酰化并由核内转移至溶酶体内, 继而在ATP和溶

血磷脂胆碱两种分泌信号指导下转移至细胞外。由坏死细胞被动释放的HMGB1和炎症细胞主动分泌的HMGB1存在分子上的差异。胞外的HMGB1可作为cell factor参与信号传导,因为它既可识别Toll样受体(TLR)家族的一些成员,又能与识别晚期糖基化终末产物受体(RAGE)相作用。HMGB1能启动炎症反应,包括产生多种cell factor、对某些Stem cells产生趋化作用、诱导血管粘附分子、削弱肠epithelial cells的功能等。

Picture:



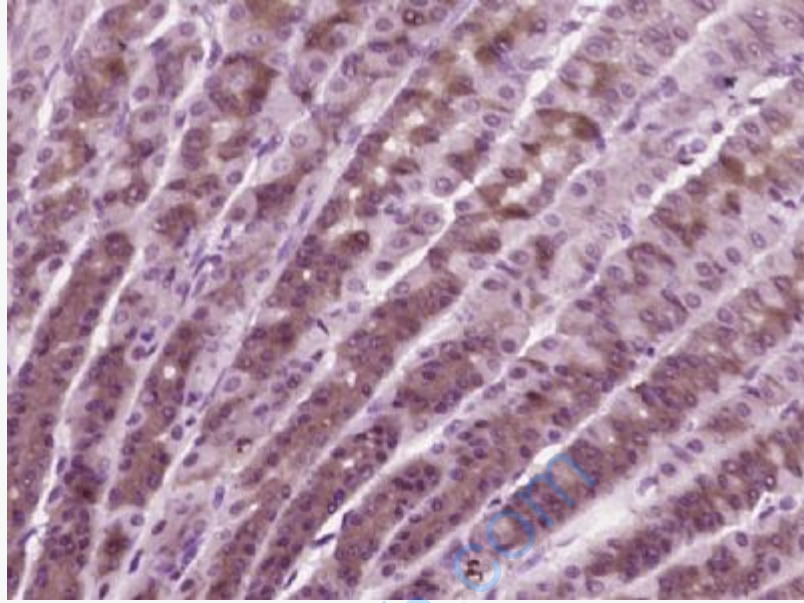
Sample: bone (mouse) Lysate at 40 ug

Primary: Anti- HMGB1(SL0664R)at 1/300 dilution

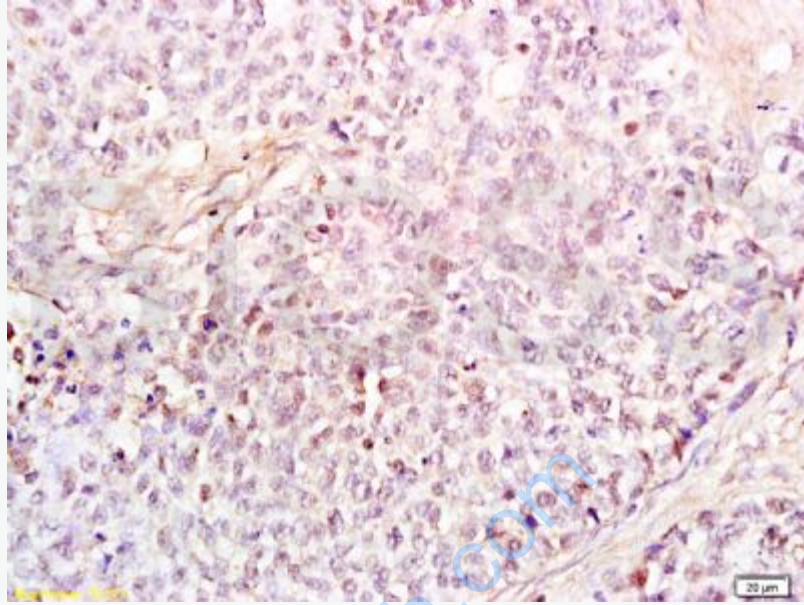
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 25 kD

Observed band size: 27kD



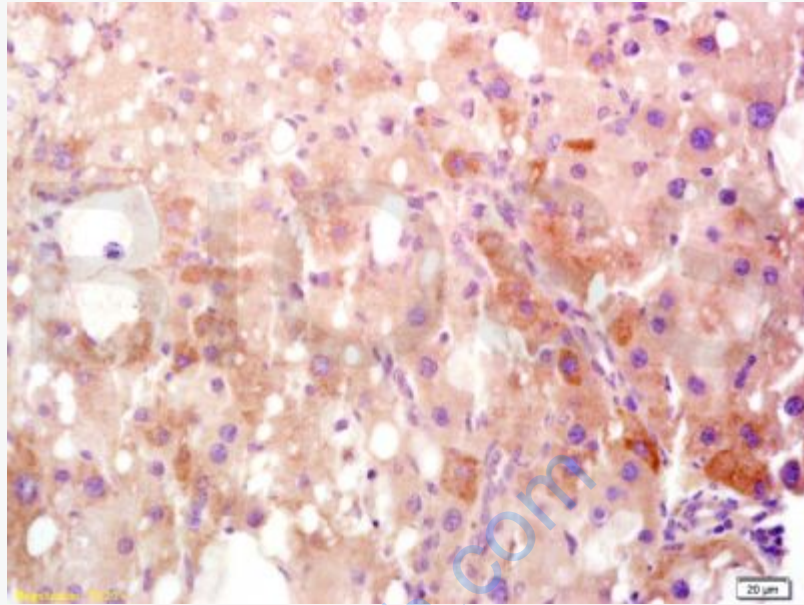
Paraformaldehyde-fixed, paraffin embedded (Rat stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (HMGB1) Polyclonal Antibody, Unconjugated (SL0664R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



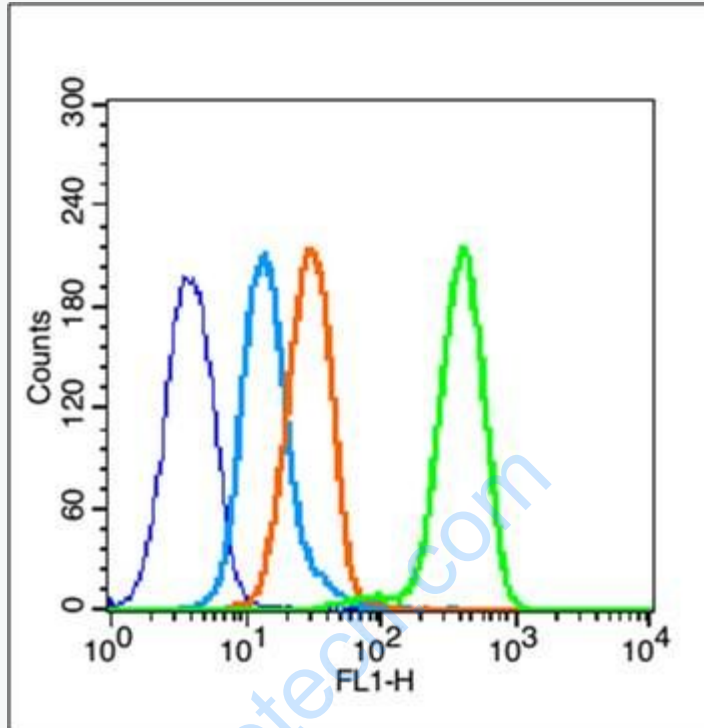
Tissue/cell: human endometrium carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-HMGB1 Polyclonal Antibody, Unconjugated(SL0664R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat liver tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-HMGB1 Polyclonal Antibody, Unconjugated(SL0664R) 1:400, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control (blue line): MCF7 (blue).

Primary Antibody (green line): Rabbit Anti-HMGB1 antibody (SL0664R)

Dilution: $1\mu\text{g} / 10^6$ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

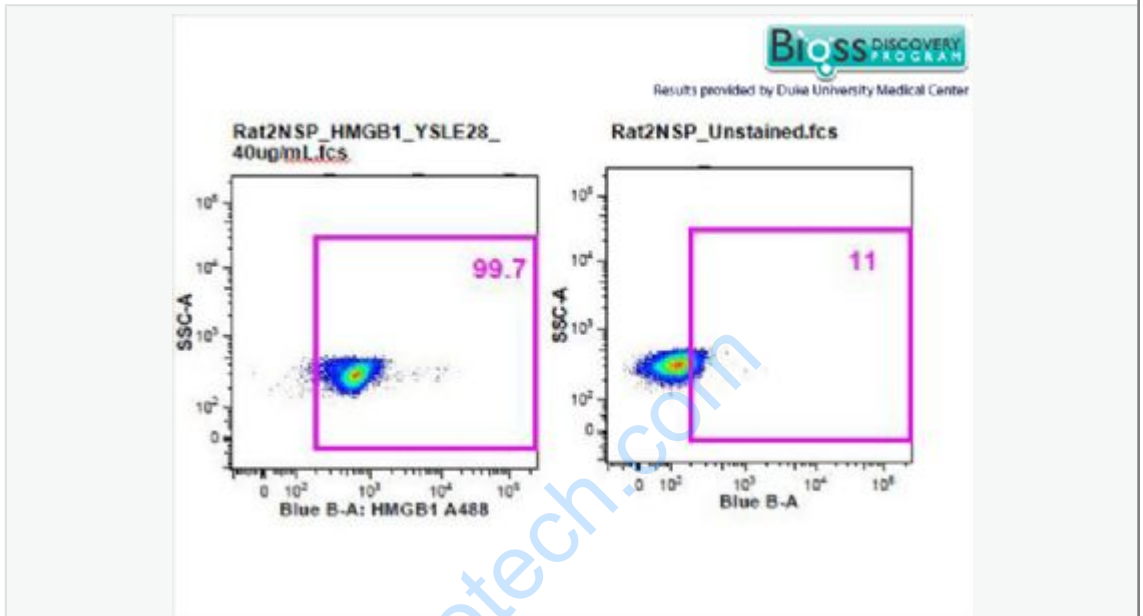
Secondary Antibody (white blue line): Goat anti-rabbit IgG-FITC

Dilution: $1\mu\text{g} / \text{test}$.

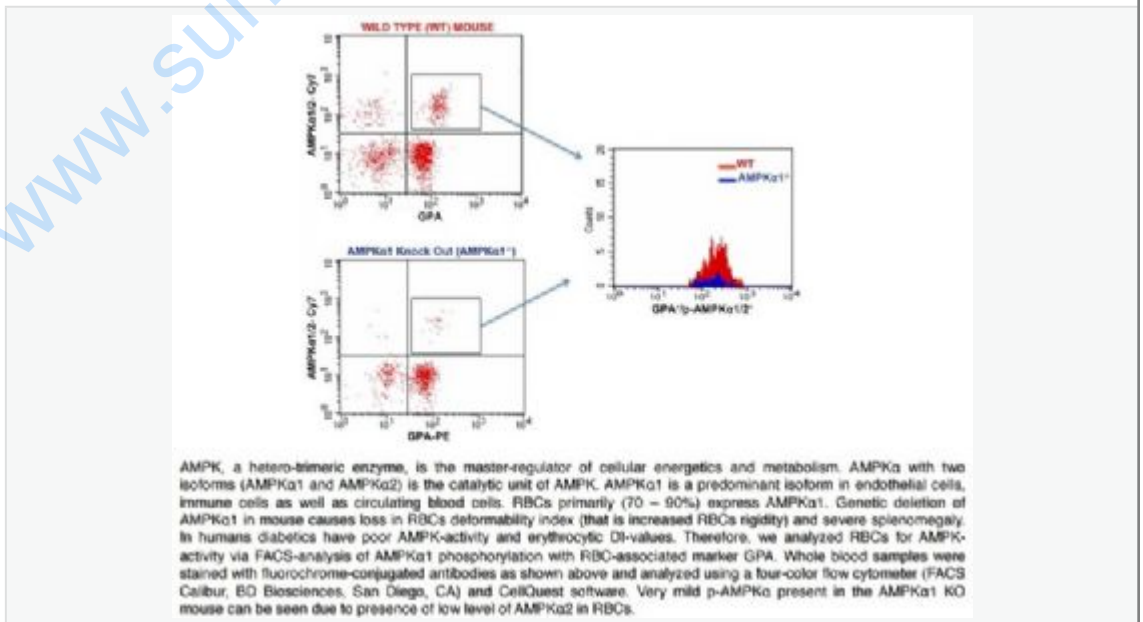
Protocol

The cells were fixed with 70% ethanol (Overnight at 4°C) and then permeabilized with 90% ice-cold methanol for 30 min on ice. Cells stained with Primary Antibody for 30 min at room temperature. The cells were then incubated in 1 X PBS/2%BSA/10% goat serum to block non-specific protein-protein interactions followed by the antibody for 15 min at room temperature. The secondary antibody

used for 40 min at room temperature. Acquisition of 20,000 events was performed.



Rat splenocytes stained with Anti- HMGB1 Polyclonal Antibody, A488 Conjugated (SL0664R) at 1:50.

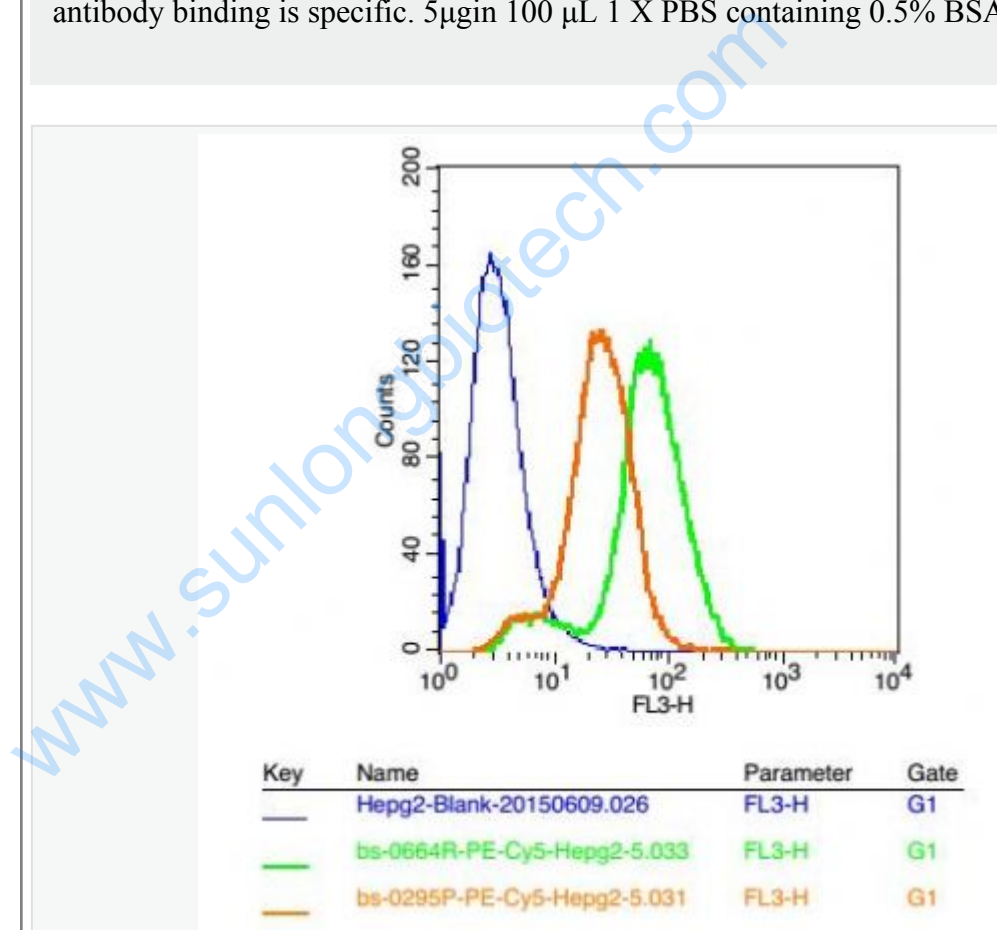


The figure annotation:

The blue histogram is unstained cells. The Orange histogram is cells stained with Rabbit IgG/FITC (SL0664R) The green histogram is cells stained with Rabbit Anti-HMGB1/FITC Conjugated antibody (SL0664R).

Controls

Positive control: HepG 2 cells Isotype control: Cell lines treated with Rabbit IgG/FITC (SL0664R). instead of the primary antibody to confirm that primary antibody binding is specific. 5µgin 100 µL 1 X PBS containing 0.5% BSA.



Positive control: HepG2 cells

Concentration: 5µg/10⁶ cells

Incubation conditions: Avoid light , 30 minutes on the ice.

