

# Product Datasheet

## HMGB1/HMG-1 Antibody (2F6) - Azide and BSA Free H00003146-M08

Unit Size: 0.1 mg

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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**H00003146-M08**

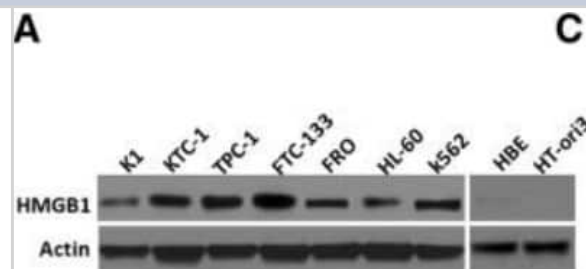
HMGB1/HMG-1 Antibody (2F6) - Azide and BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	2F6
Preservative	No Preservative
Isotype	IgG2a Kappa
Purity	IgG purified
Buffer	In 1x PBS, pH 7.4
Product Description	
Description	Quality control test: Antibody Reactive Against Recombinant Protein.
Host	Mouse
Gene ID	3146
Gene Symbol	HMGB1
Species	Human, E. coli
Specificity/Sensitivity	HMGB1 - high-mobility group box 1
Immunogen	HMGB1 (NP_002119, 1 a.a. ~ 90 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. MGKGDPPKPRGKMSSYAFFVQTCREEHKKKHPDASVNFSEFSKKCSERWKT MSAKEKGKFEDMAKADKARYEREMKTYIPPKGETKKKFK
Notes	This product is produced by and distributed for Abnova, a company based in Taiwan.
Product Application Details	
Applications	Western Blot, ELISA, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Block/Neutralize, Knockdown Validated
Recommended Dilutions	Western Blot 1:500, ELISA 1:100-1:2000, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence 10 ug/ml, Immunohistochemistry-Paraffin 3 ug/ml, Knockdown Validated, Block/Neutralize
Application Notes	This antibody reactivity against cell lysate and recombinant protein for WB. IT has been used for IF, IHC-P, and ELISA. B/N usages reported in scientific literature (PMID: 21126167).

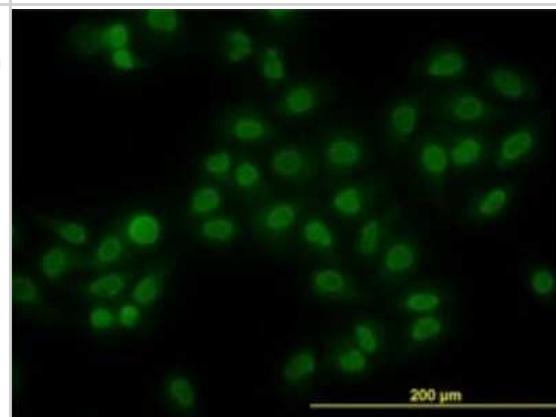


## Images

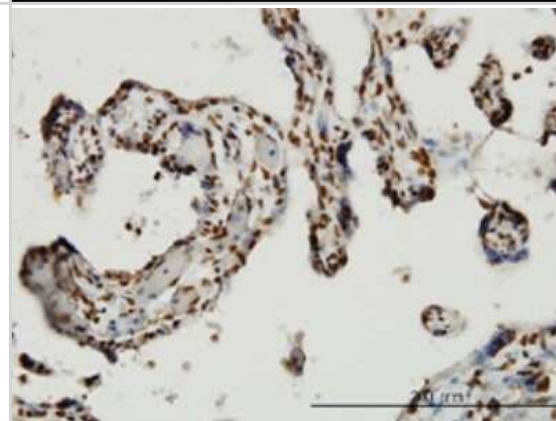
Western Blot: HMGB1/HMG-1 Antibody (2F6) [H00003146-M08] - HMGB1/HMG-1 expression became up-regulated in thyroid cancer and was associated with clinicopathologic features. Immunohistochemical staining of HMGB1/HMG-1 was performed for different tissues. TC, thyroid cancer; TA, thyroid adenoma; SG, simple goiter; N, normal thyroid; PTC, papillary thyroid carcinoma; FTC, follicular thyroid carcinoma. Image collected and cropped by CiteAb from the following publication ([www.jecr.biomedcentral.com/articles/10.1186/s13046-019-1328-3](http://www.jecr.biomedcentral.com/articles/10.1186/s13046-019-1328-3)) licensed under a CC-BY license.



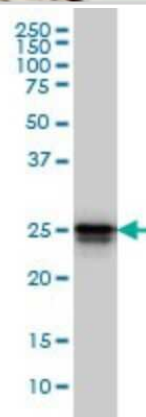
Immunocytochemistry/Immunofluorescence: HMGB1/HMG-1 Antibody (2F6) [H00003146-M08] - Analysis of monoclonal antibody to HMGB1 on HeLa cell. Antibody concentration 10 ug/ml



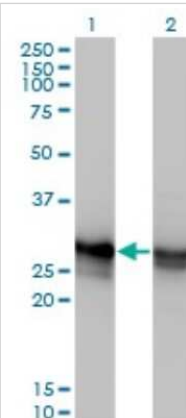
Immunohistochemistry-Paraffin: HMGB1/HMG-1 Antibody (2F6) [H00003146-M08] - Analysis of monoclonal antibody to HMGB1 on formalin-fixed paraffin-embedded human placenta. Antibody concentration 3 ug/ml



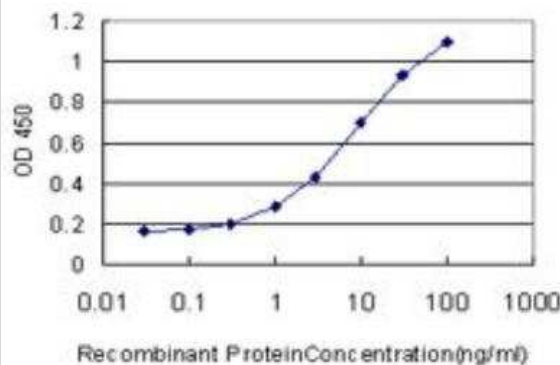
Western Blot: HMGB1/HMG-1 Antibody (2F6) [H00003146-M08] - Analysis of HMGB1 expression in Hela S3 NE (Cat # L013V3).



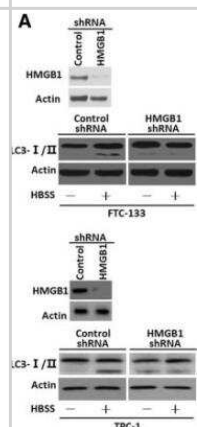
Western Blot: HMGB1/HMG-1 Antibody (2F6) [H00003146-M08] - Analysis of HMGB1 expression in transfected 293T cell line by HMGB1 monoclonal antibody (M08), clone 2F6. Lane 1: HMGB1 transfected lysate (25 KDa). Lane 2: Non-transfected lysate.



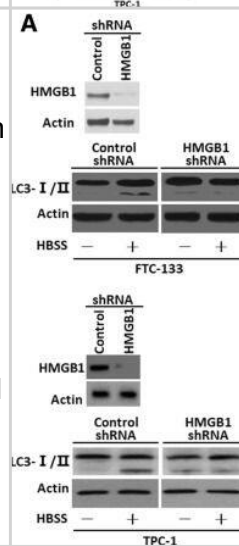
ELISA: HMGB1/HMG-1 Antibody (2F6) [H00003146-M08] - Detection limit for recombinant GST tagged HMGB1 is approximately 0.3ng/ml as a capture antibody.



Western Blot: HMGB1/HMG-1 Antibody (2F6) [H00003146-M08] - HMGB1/HMG-1 regulated autophagy in thyroid cancer cells. FTC-133/TPC-1 cells were transfected with HMGB1/HMG-1 shRNA and control shRNA and then starved by HBSS for 2 h. And LC3-I/II (NB600-1384) level was assayed by Western blot. Image collected and cropped by CiteAb from the following publication ([www.jecr.biomedcentral.com/articles/10.1186/s13046-019-1328-3](http://www.jecr.biomedcentral.com/articles/10.1186/s13046-019-1328-3)) licensed under a CC-BY license.



Immunohistochemistry: HMGB1/HMG-1 Antibody (2F6) [H00003146-M08] - HMGB1 regulated autophagy in thyroid cancer cells (a) FTC-133/TPC-1 cells were transfected with HMGB1 shRNA & control shRNA & then starved by HBSS for 2 h. & LC3-I/II level was assayed by Western blot; (b) FTC-133/TPC-1 cells were transfected with HMGB1 shRNA & control shRNA & then pre-treated for 1 h with pepstatin A (PA, 10  $\mu$ M) & E64D (10  $\mu$ M) as indicated. Cells were subsequently treated for 3 h with HBSS in continuous presence or absence PA/E64D inhibitors. LC3-I/II, Beclin1 & p62 levels were assayed by Western blot; (c) Ultrastructural features in FTC-133/TPC-1 cells transfected with HMGB1 shRNA & control shRNA after a 3-h treatment of HBSS. More autophagosomes were seen in control shRNA plus HBSS-treated cells than in cells treated with HMGB1 shRNA plus HBSS. Arrows indicated autophagosomes. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31331356/>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



## Publications

Chai W, Ye F et al. HMGB1-mediated autophagy regulates sodium/iodide symporter protein degradation in thyroid cancer cells. *J Exp Clin Cancer Res* 2019-07-22 [PMID: 31331356]

Bhuyan S, Pal B, Pathak L, Saikia P, Mitra S, Gayan S, Mokhtari R, Li H, Ramana C, Baishya D, Das B Targeting hypoxia-induced tumor stemness by activating pathogen-induced stem cell niche defense. *Front Immunol*, 2022-09-29;13(0):933329. 2022-09-29 [PMID: 36248858]

Liu L, Liu S, Luo H et al. GPR30-mediated HMGB1 upregulation in CAFs induces autophagy and tamoxifen resistance in ER<sup>+</sup>-positive breast cancer cells *Aging (Albany NY)* 2021-06-30 [PMID: 34182538] (In vivo assay)

Yang L, Ye F, Zeng L et al. Knockdown of HMGB1 Suppresses Hypoxia-Induced Mitochondrial Biogenesis in Pancreatic Cancer Cells *Onco Targets Ther* 2020-02-12 [PMID: 32103987] (WB, KD, Human)

Xie Yangchun, Zhu Shan, Zhong Meizuo et al. Inhibition of Aurora Kinase A Induces Necroptosis in Pancreatic Carcinoma. *Gastroenterology* 2017-07-02 [PMID: 28764929] (WB, Human)

Ye F, Chai W, Xie M HMGB1 regulates erastin-induced ferroptosis via RAS-JNK/p38 signaling in HL-60/NRASQ61L cells *Am J Cancer Res* 2019-04-01 [PMID: 31105999] (WB, ICC/IF, Human)

Chen X, Ma J, Kwan T et al. Blockade of HMGB1 Attenuates Diabetic Nephropathy in Mice. *Sci Rep* 2018-05-29 [PMID: 29844451]

Livezey M, Huang R, Hergenrother PJ, Shapiro DJ. Strong and sustained activation of the anticipatory unfolded protein response induces necrotic cell death *Cell Death Differ*. 2018-06-13 [PMID: 29899383] (WB, Human)

Di Candia L, Gomez E, Venereau E et al. HMGB1 is upregulated in the airways in asthma and potentiates airway smooth muscle contraction via TLR4. *J Allergy Clin Immunol* 2017-02-23 [PMID: 28259445]

Yu Y, Xie Y, Cao L et al. The ferroptosis inducer erastin enhances sensitivity of acute myeloid leukemia cells to chemotherapeutic agents. *Mol Cell Oncol* 2015-10-01 [PMID: 27308510] (WB)

Zhou J, Huang JD, Poon VK et al. Functional dissection of an IFN-alpha/beta receptor 1 promoter variant that confers higher risk to chronic hepatitis B virus infection. *J Hepatol*. 2009-05-03 [PMID: 19501422]

Yang M, Liu L, Xie M et al. Poly-ADP-ribosylation of HMGB1 regulates TNFSF10/TRAIL resistance through autophagy *Autophagy*. 2015-01-21 [PMID: 25607248]

More publications at <http://www.novusbio.com/H00003146-M08>





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### **Products Related to H00003146-M08**

HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-96981-0.5mg	Mouse IgG2a Kappa Isotype Control (M2AK)
NBP2-34960-10ug	Recombinant Human HMGB1/HMG-1 His (C-Term) Protein

### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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