## For Research Use Only

# HMGA2 Polyclonal antibody

Catalog Number: 20795-1-AP

**Featured Product** 

35 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number:

20795-1-AP NM 003483 GeneID (NCBI): Size:

150ul , Concentration: 650  $\mu g/ml$  by

Nanodrop: **UNIPROT ID:** P52926 Rabbit Full Name:

Isotype high mobility group AT-hook 2

IgG Calculated MW: Immunogen Catalog Number: 108 aa, 12 kDa AG14588 Observed MW: 18-20 kDa

**Purification Method:** Antigen affinity purification Recommended Dilutions:

WB 1:5000-1:50000 IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:250-1:1000 IF 1:50-1:500

**Applications** 

**Tested Applications:** WB, IP, IF, IHC, ELISA

Cited Applications: WB, IF, IHC, CoIP Species Specificity: human, mouse, rat

**Cited Species:** human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

#### Positive Controls:

WB: A549 cells, HepG2 cells, NIH/3T3 cells, C6 cells,

HCT 116 cells, NCI-H1299 cells

IP: NIH/3T3 cells,

IHC: human pancreas cancer tissue, human colon

cancer tissue IF: A549 cells,

# **Background Information**

HMGA2 belongs to the family of high mobility group with AT-hook DNA binding domain. HMGA proteins are considered architectural transcription factors; they do not have direct transcriptional activation capacity, but instead regulate gene expression by changing DNA conformation through binding to AT-rich regions in the DNA and/or direct interaction with other transcription factors (PMID: 18202751,19551524). HMGA2 is abundantly and ubiquitously expressed and plays a crucial role during embryonic development (18425117). HMGA2 promotes stem cell self-renewal and research studies have shown that decreased HMGA2 expression is associated with stem cell aging (19551524). Investigators have shown that expression levels of HMGA2 are very low in normal adult tissues, while either overexpression or rearrangement is associated with many types of cancer (PMID: 20228781). The calcualted molecular weight of HMGA2 is 12 kDa, but modified HMGA2 is about 18-20 kDa. (PMID: 18505920)

## **Notable Publications**

Author	Pubmed ID	Journal	Application
Miao Li	30247605	J Clin Endocrinol Metab	IHC
Junjie Hasenbilige	34481905	Toxicology	WB
Ri-Xin Chen	31619685	Nat Commun	WB

Storage

Store at -20°C. Stable for one year after shipment.

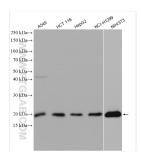
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

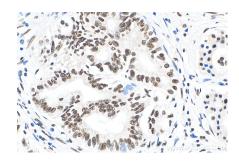
\*\*\* 20ul sizes contain 0.1% BSA

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

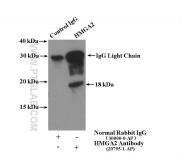
# **Selected Validation Data**



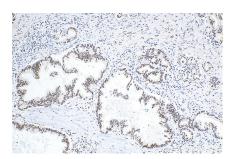
Various lysates were subjected to SDS PAGE followed by western blot with 20795-1-AP (HMGA2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



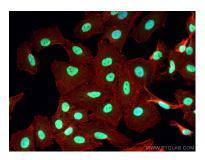
Immunohistochemical analysis of paraffinembedded human pancreas cancer tissue slide using 20795-1-AP (HMGA2 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-HMGA2 (IP:20795-1-AP, 4ug; Detection:20795-1-AP 1:1000) with NIH/3T3 cells lysate 3200ug.



Immunohistochemical analysis of paraffinembedded human pancreas cancer tissue slide using 20795-1-AP (HMGA2 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed A549 cells using HMGA2 antibody (20795-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).