

# **Product datasheet**

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# ARG64975 anti-HMGA1 antibody

Package: 100 μg Store at: -20°C

# **Summary**

Product Description Goat Polyclonal antibody recognizes HMGA1

Tested Reactivity Hu

Predict Reactivity Ms, Rat, Cow, Dog, Pig

Tested Application IHC-P, WB

Specificity This antibody is expected to recognize reported isoforms a (NP\_665906.1, NP\_665908.1, NP\_665911.1)

and b (NP\_002122.1, NP\_665910.1, NP\_665912.1). This antibody is not expected to cross-react with

HMGA2.

Host Goat

**Clonality** Polyclonal

Isotype IgG

Target Name HMGA1
Species Human

Immunogen C-SQPLASKQEKDGT

Conjugation Un-conjugated

Alternate Names HMG-I; High mobility group protein HMG-I/HMG-Y; High mobility group protein A1; High mobility group

protein R; Y; High mobility group AT-hook protein 1; HMG-R; HMGA1A; HMGIY

# **Application Instructions**

Application table	Application	Dilution
	IHC-P	3 - 5 μg/ml
	WB	0.5 - 1 μg/ml
Application Note	WB: Recommend incubate at RT for 1h.  IHC-P: Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0).  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### **Properties**

Form	Liquid	
Purification	Purified from goat serum by antigen affinity chromatography.	
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.	
Preservative	0.02% Sodium azide	
Stabilizer	0.5% BSA	
Concentration	0.5 mg/ml	

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

### Bioinformation

Database links <u>GeneID: 3159 Human</u>

Swiss-port # P17096 Human

Background This gene encodes a non-histone protein involved in many cellular processes, including regulation of

inducible gene transcription, integration of retroviruses into chromosomes, and the metastatic progression of cancer cells. The encoded protein preferentially binds to the minor groove of A+T-rich regions in double-stranded DNA. It has little secondary structure in solution but assumes distinct conformations when bound to substrates such as DNA or other proteins. The encoded protein is frequently acetylated and is found in the nucleus. At least seven transcript variants encoding two

different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Research Area Cancer antibody; Gene Regulation antibody; Microbiology and Infectious Disease antibody

Calculated Mw 12 kDa

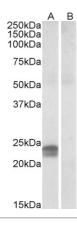
PTM Constitutively phosphorylated on two or three sites. Hyperphosphorylated at early stages of apoptosis,

followed by dephosphorylation and methylation, which coincides with chromatin condensation. Isoforms HMG-I and HMG-Y can be phosphorylated by HIPK2. Phosphorylation of HMG-I at Ser-36, Thr-53 and Thr-78 and of HMG-Y at Thr-42 and Thr-67 by HIPK2 modulates DNA-binding affinity.

HMG-Y is not methylated.

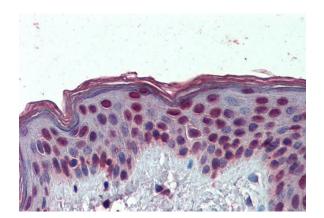
Methylation at Arg-58 is mutually exclusive with methylation at Arg-60.

#### **Images**



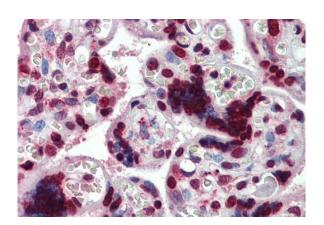
#### ARG64975 anti-HMGA1 antibody WB image

Western Blot: Human Pancreas lysate (35  $\mu g$  protein in RIPA buffer) with (B) and without (A) blocking with the immunising peptide. stained with ARG64975 anti-HMGA1 (aa9-21) antibody at 0.5  $\mu g/ml$  dilution.



### ARG64975 anti-HMGA1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human skin tissue. Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). The tissue section was stained with ARG64975 anti-HMGA1 antibody at 3.75  $\mu g/ml$  dilution followed by AP-staining.



#### ARG64975 anti-HMGA1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human placenta tissue. Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). The tissue section was stained with ARG64975 anti-HMGA1 antibody at 3.75  $\mu g/ml$  dilution followed by AP-staining.