

HMGB2 Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP53302

Product Information

Application	WB
Primary Accession	P26583
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24034

Additional Information

Gene ID	3148
Other Names	High mobility group protein B2, High mobility group protein 2, HMG-2, HMGB2, HMG2
Dilution	WB~~ 1:500
Format	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	HMGB2
Synonyms	HMG2
Function	Multifunctional protein with various roles in different cellular compartments. May act in a redox sensitive manner. In the nucleus is an abundant chromatin-associated non-histone protein involved in transcription, chromatin remodeling and V(D)J recombination and probably other processes. Binds DNA with a preference to non- canonical DNA structures such as single-stranded DNA. Can bent DNA and enhance DNA flexibility by looping thus providing a mechanism to promote activities on various gene promoters by enhancing transcription factor binding and/or bringing distant regulatory sequences into close proximity (PubMed: 11909973 , PubMed: 18413230 , PubMed: 19522541 , PubMed: 19965638 , PubMed: 20123072 , PubMed: 7797075). 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) (By similarity). Proposed to be involved in the innate immune response to nucleic acids by acting as a promiscuous immunogenic DNA/RNA

sensor which cooperates with subsequent discriminative sensing by specific pattern recognition receptors (By similarity). In the extracellular compartment acts as a chemokine. Promotes proliferation and migration of endothelial cells implicating AGER/RAGE (PubMed:[19811285](#)). Has antimicrobial activity in gastrointestinal epithelial tissues (PubMed:[23877675](#)). Involved in inflammatory response to antigenic stimulus coupled with pro- inflammatory activity (By similarity). Involved in modulation of neurogenesis probably by regulation of neural stem proliferation (By similarity). Involved in articular cartilage surface maintenance implicating LEF1 and the Wnt/beta-catenin pathway (By similarity).

Cellular Location

Nucleus. Chromosome. Cytoplasm. Secreted. Note=In basal state predominantly nuclear.

Tissue Location

Expressed in gastric and intestinal tissues (at protein level).

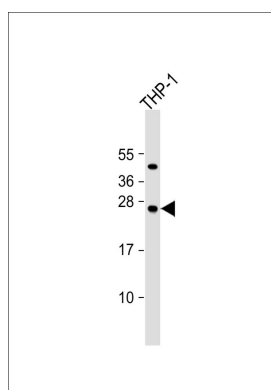
Background

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) (By similarity).

References

Majumdar A.,et al.Nucleic Acids Res. 19:6643-6643(1991).
Shirakawa H.,et al.J. Biol. Chem. 267:6641-6645(1992).
Kalnine N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

Images



Anti-HMGB2 Antibody at 1:500 dilution + THP-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 24 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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