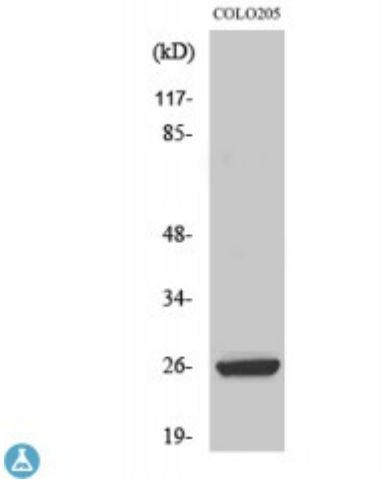
Anti-HMG-2 antibody



Description	Rabbit polyclonal to HMG-2.

Model	STJ93552
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human HMG-2
Immunogen Region	100-180 aa, Internal
Gene ID	3148
Gene Symbol	HMGB2
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:10000
Specificity	HMG-2 Polyclonal Antibody detects endogenous levels of HMG-2 protein.
Tissue Specificity	Expressed in gastric and intestinal tissues (at protein level).
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	High mobility group protein B2 High mobility group protein 2 HMG-2
Molecular Weight	27 kDa
Clonality	Polyclonal
Conjugation	Unconjugated

Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:5000OMIM:163906
Alternative Names	High mobility group protein B2 High mobility group protein 2 HMG-2
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 . 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) . 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 . In the extracellular compartment acts as a chemokine. Promotes proliferation and migration of endothelial cells implicating AGER/RAGE . Has antimicrobial activity in gastrointestinal epithelial tissues . Involved in inflammatory response to antigenic stimulus coupled with proinflammatory activity . Involved in modulation of neurogenesis probably by regulation of neural stem proliferation . Involved in articular cartilage surface maintenance implicating LEF1 and the Wnt/beta-catenin pathway .
Sequence and Domain Family	Both, HMG box 1 and HMG box 2, show antimicrobial activity.
Cellular Localization	Nucleus Chromosome Cytoplasm Secreted. In basal state predominantly nuclear.
Post-translational Modifications	Reduction/oxidation of cysteine residues Cys-23, Cys-45 and Cys-106 and a possible intramolecular disulfide bond involving Cys-23 and Cys-45 give rise to different redox forms with specific functional activities in various cellular compartments: 1- fully reduced HMGB2 (HMGB2C23hC45hC106h), 2-disulfide HMGB2 (HMGB2C23-C45C106h) and 3- sulfonyl HMGB2 (HMGB2C23soC45soC106so). Acetylation enhances nucleosome binding and chromation remodeling activity.