

## HMG-1 antibody (pAb)

**Catalog Nos:** 39551, 39552

**RRID:** AB\_2615040

**Isotype:** Serum

**Application(s):** WB

**Reactivity:** Human

**Volumes:** 200 µl, 10 µl

**Purification:** None

**Host:** Rabbit

**Molecular Weight:** 32 kDa

**Background:** High mobility group proteins (HMG) are non-histone chromatin-associated proteins involved in DNA organization or regulation of transcription. Constitutively expressed in the nucleus of eukaryotic cells, HMGs share functional motifs that bind specific DNA structures (minor grooves) and induce conformational changes without specificity for target sequences. A Class II HMG member, HMG-1 binds to bent or distorted DNA such as four-way DNA junctions, synthetic DNA cruciforms, kinked cisplatin-modified DNA, DNA bulges and cross-overs in supercoiled DNA. It can cause looping of linear DNA, thus functioning as an architectural element that facilitates interactions of neighboring proteins and DNA by creating favorable DNA conformations. Extremely versatile, HMG-1 and HMG-2 are involved in numerous DNA events in the nucleus such as DNA repair, replication, recombination and transcription. Its nuclear localization and affinity for DNA is regulated through phosphorylation and acetylation, and has been found to have a dynamic relationship with chromatin. HMG-1 has been shown to stimulate the binding of a variety of sequence-specific DNA-binding proteins such as p53 *in vitro*, playing an important role in DNA architecture and transcriptional regulation.

**Immunogen:** This HMG-1 antibody was raised against a synthetic peptide corresponding to amino acid residue(s) 167-182 of human HMG-1.

**Buffer:** Rabbit serum containing 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

### Application Notes:

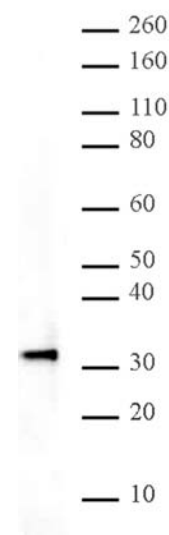
Applications Validated by Active Motif:

WB: 1:500 - 1:2,000 dilution

Individual optimization may be required.

**Storage and Guarantee:** Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



### HMG-1 pAb tested by Western blot.

Detection of trimethylated HMG-1 by Western blot. The analysis was performed using 20 µg HeLa acid extract and HMG-1 pAb at a 1:2,000 dilution.