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## Product Datasheet

### Human HMGB1 protein, His tag, Unconjugated GTX00154-PRO

|                            |                                                                                                                                                       |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Article Name               | Human HMGB1 protein, His tag, Unconjugated                                                                                                            |
| Biozol Catalog Number      | GTX00154-PRO                                                                                                                                          |
| Supplier Catalog Number    | GTX00154-pro                                                                                                                                          |
| Alternative Catalog Number | GTX00154-PRO-10                                                                                                                                       |
| Manufacturer               | GeneTex                                                                                                                                               |
| Category                   | Proteine/Peptide                                                                                                                                      |
| Application                | FA                                                                                                                                                    |
| Species Reactivity         | Human                                                                                                                                                 |
| Conjugation                | Unconjugated                                                                                                                                          |
| NCBI                       | <a href="#">3146</a>                                                                                                                                  |
| UniProt                    | <a href="#">P09429</a>                                                                                                                                |
| Buffer                     | Reconstitute with 10mM PBS (pH7.4) to 0.1-1.0mg/ml. Do not vortex.<br>Lyophilized from PBS (pH7.4), 0.01% SKL, 1mM DTT, 5% Trehalose,<br>ProClin 300. |
| Expression System          | HEK293 cells                                                                                                                                          |
| Form                       | Lyophilized powder                                                                                                                                    |
| Sequence                   | Full length protein, N-terminal His-Tag, Met1~Glu215<br>(NP_001300821.1)                                                                              |

Application Notes

High Mobility Group Protein 1 (HMG1), also known as high mobility group box 1 protein belongs to high mobility group and contains HMG-box domain. HMG1 is one of the most important chromatin proteins. This nuclear protein organizes the DNA and regulates transcription. It supports transcription of many genes in interactions with many transcription factors. HMGB1 is secreted by immune cells (like macrophages, monocytes and dendritic cells) through leaderless secretory pathway. Activated macrophages and monocytes secrete HMGB1 as a cytokine mediator of Inflammation. Besides, Tumor Protein p53 (TP53) has been identified as an interactor of HMG1, thus a binding ELISA assay was conducted to detect the interaction of recombinant human HMG1 and recombinant human TP53. Briefly, HMG1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to TP53-coated microtiter wells and incubated for 2h at 37C. Wells were washed with PBST and incubated for 1h with anti-HMG1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of HMG1 and TP53 was in a dose dependent manner.