

StemTAG Alkaline Phosphatase Activity Assay Kit

StemTAG Alkaline Phosphatase Activity Assay Kit, Colorimetric

CATALOG #
AAA44542

PRODUCT SYNONYMS

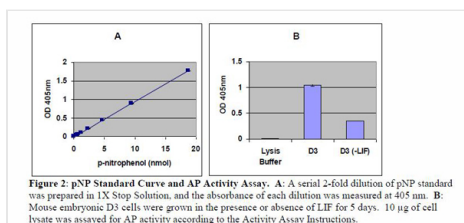
StemTAG Alkaline Phosphatase Activity; StemTAG Alkaline Phosphatase Activity Assay Kit; Colorimetric; StemTAG Alkaline Phosphatase Activity Assay Kit (Colorimetric); StemTAG Alkaline Phosphatase Activity assay kit

PRODUCT SPECIFICATIONS

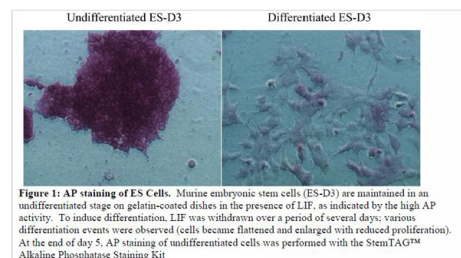
Preparation and Storage

Store all components at 4 degree C until their expiration dates.

IMAGES



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for StemTAG Alkaline Phosphatase Activity assay kit

Background: Embryonic stem (ES) cells are continuous proliferating stem cell lines of embryonic origin first isolated from the inner cell mass (ICM). Two distinguishing features of ES cells are their ability to be maintained indefinitely in an undifferentiated state and their potential to develop into any cell within the body. Based on previous methods developed for mouse ES cells, human ES cell lines were first established by Dr. James Thomson and colleagues. Like mouse ES cells, human ES cells express high levels of membrane alkaline phosphatase (AP) and Oct-4, a transcriptional factor critical to ICM and germline formation. However, unlike mouse ES cells, hES cells do not express stage-specific embryonic antigen (SSEA-1). In addition, prolonged propagation of hES cells is typically achieved by coculture with primary mouse embryonic fibroblasts (MEFs) serving as feeder cells. Human ES cell lines are not able to maintain their undifferentiated state in the absence of supporting feeder layer cells, even when exogenous cytokines such as leukemia inhibitory factor (LIF) and gelatin-coated plates are used.

Product Categories/Family for StemTAG Alkaline Phosphatase Activity assay kit

Stem Cell Research; Alkaline Phosphatase Detection

References

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3. Smith AG, Nichols J, Robertson M et al. (1992) Dev Biol 151:339-351.
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2. Dixon, J.E. et al. (2014). Combined hydrogels that switch human pluripotent stem cells from self-renewal to differentiation. PNAS 111:5580-5585.
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4. Kim, Y. et al. (2009). Cyclin-dependent kinase 2-associating protein 1 commits murine embryonic stem cell differentiation through retinoblastoma protein regulation. J. Biol. Chem. 284:23405- 23414.
5. Yue, Y. et al. (2008). A single intravenous injection of adeno-associated virus serotype-9 leads to whole body skeletal muscle transduction in dogs. Mol. Ther. Sep. 30 Epub.
6. Ghosh, A. et al. (2007). Efficient whole-body transduction with trans-splicing adeno-associated viral vectors. Mol. Ther. 15(6):1220.
7. Shi, X. et al. (2007). The oncogenic potential of a prostate cancer-derived androgen receptor mutant. The Prostate 67(6):591-602.
8. Dharmacon Application Note: DharmaFect Transfection Reagents for siRNA Transfection into Embryonic Stem Cells (2006). Publication # 00078-06-E-01-U.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/assay-kits/stemtag-alkaline-phosphatase-activity/44542>