Product Specification Sheet

Product Name	Stemgent® StainAlive™ TRA-1-60 Antibody (DyLight™ 488), Mouse anti-Human
Description	The TRA-1-60 antibody reacts with a pluripotent, stem cell specific antigen expressed on undifferentiated human embryonic stem (ES) cells, embryonal carcinoma (EC) cells, and embryonic germ (EG) cells. The expression of TRA-1-60 on human ES cells is down-regulated upon differentiation. The TRA-1-60 antibody recognizes a neuraminidase-resistant carbohydrate epitope expressed on podocalyxin, a member of the CD34-related family of sialomucins. Podocalyxin is a transmembrane glycoprotein, which has been implicated in the development of aggressiveness in a variety of cancers, including breast and prostate cancer. For use on live cells, this antibody has been specifically formulated with low endotoxin and no sodium azide. ES cell morphology, proliferation, and expression of pluripotency markers does not change after staining with this antibody.
Catalog Number	09-0068
Size	100 µl
Concentration	0.5 mg/ml
Clone	TRA-1-60
Isotype	Mouse IgM, κ
Immunogen	Human embryonal carcinoma cell line 2102Ep
Reactivity	Human
Preparation	This antibody was purified by affinity chromatography and conjugated with DyLight 488 under optimal conditions. The solution is free of unconjugated dye and unlabeled antibody. 0.2 µm filter sterilized. Formulation is free from bacteria, fungi, mycoplasma, and mouse virus.
Formulation	Phosphate-buffered solution, pH 7.2, containing no preservative
Storage and Stability	Store at 4°C protected from light. Do not freeze. Handle under aseptic conditions. Stable for 6 months from date of receipt when stored as directed.
Quality Control	Tested by immunocytochemistry to ensure product quality (**Figure 1**). Endotoxin level is less than 0.1 EU/µg (0.01 ng/µg) of the protein as determined by the LAL assay.
Recommended Usage	The suggested use of this antibody is a 1:100 dilution for immunocytochemistry. For an application specific protocol, please reference *Protocol: Immunocytochemistry of Live Cells* online at www.stemgent.com/support/protocols.

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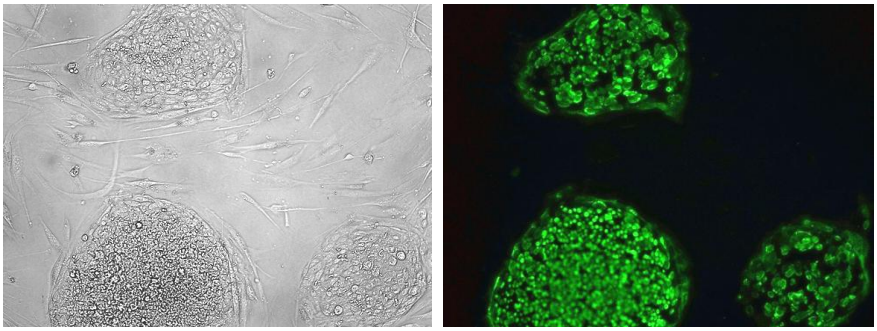

Figure 1. Immunocytochemical analysis of TRA-1-60 on H1 human ES cells. Phase contrast view of cells in culture and the same field of view after staining with StainAlive TRA-1-60 Antibody (DyLight 488) using a 1:100 dilution.

References

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3. Schopperle, W.M., and DeWolf, W.C. (2007) The TRA-1-60 and TRA-1-81 human pluripotent stem cell markers are expressed on podocalyxin in embryonal carcinoma. Stem Cells 25: 723-730.
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6. Andrews, P.W., Banting, G., Damjanov, I., Arnaud, D., and Avner, P. (1984) Three monoclonal antibodies defining distinct differentiation antigens associated with different high molecular weight polypeptides on the surface of human embryonal carcinoma cells. Hybridoma 3: 347.

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