

Datasheet: MCA1557SBB765

BATCH NUMBER 100007137

Description:	MOUSE ANTI HUMAN CD105:StarBright Blue 765		
Specificity:	CD105		
Other names:	ENDOGLIN		
Format:	StarBright Blue 765		
Product Type:	Monoclonal Antibody		
Clone:	SN6		
Isotype:	lgG1		
Quantity:	100 TESTS/0.5ml		

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	•			Neat

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Species Cross			
_ •			
Reactivity			

Target Species

Reacts with: Horse, Cynomolgus monkey, Rhesus Monkey Based on sequence similarity, is expected to react with:Primate

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

further information.

supernatant

Human

Purified IgG conjugated to StarBright Blue 765 - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	StarBright Blue 765	476	764

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture

Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	 0.09% Sodium Azide (NaN₃) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20 	
Immunogen	Partially purified cell membrane antigens from fresh leukemia c	ells
External Database Links	UniProt: P17813 Related reagents Entrez Gene: 2022 ENG Related reagents	
Synonyms	END	
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cell /1-Ag4-1 myeloma cell line	s of the mouse P3/NS1
Specificity	Mouse anti Human CD105 antibody, clone SN6 recognizes h known as CD105. CD105 is a glycoprotein homodimer of ~95 k endothelial cells, activated monocytes and some leukemia cells	Da subunits expressed by
Flow Cytometry	Use 5ul of the suggested working dilution to label 10 ⁶ cells in 1 suggest a 5 minutes centrifugation at 6,000g prior to sample ap	•
References	 Hauser, P.V. <i>et al.</i> (2010) Stem cells derived from human amacute kidney injury recovery. Am J Pathol. 177: 2011-21. Jin, H.J. <i>et al.</i> (2010) GD2 expression is closely associated wof human umbilical cord blood-derived mesenchymal stem cells 1845-58. Nagano, M. <i>et al.</i> (2007) Identification of functional endotheling for the treatment of ischemic tissue using human umbilical cord 151-60. Braun, J. <i>et al.</i> (2010) Evaluation of the osteogenic and chord capacities of equine adipose tissue-derived mesenchymal stem (10): 1228-36. Diaz-Romero, J. <i>et al.</i> (2008) Immunophenotypic changes of chondrocytes during monolayer culture reflect bona fide dediffer amplification of progenitor cells. J Cell Physiol. 214: 75-83. Agha-Hosseini, F. <i>et al.</i> (2010) In vitro isolation of stem cells pulp. Clin Transplant. 24: E23-8. Arufe, M.C. <i>et al.</i> (2010) Chondrogenic potential of subpopul mesenchymal stem cell markers derived from human synovial in Biochem. 111: 834-45. 	with neuronal differentiation s. Cell Mol Life Sci. 67 (11): al progenitor cells suitable d blood. Blood 110 (1): adrogenic differentiation a cells. Am J Vet Res. 71 f human articular arentiation rather than derived from human dental ations of cells expressing

- 8. Balmayor, E.R. *et al.* (2011) Synthesis and functionalization of superparamagnetic poly-ε-caprolactone microparticles for the selective isolation of subpopulations of human adipose-derived stem cells. J R Soc Interface 8: 896-908.
- 9. Benetti, A. *et al.* (2008) Transforming growth factor-beta1 and CD105 promote the migration of hepatocellular carcinoma-derived endothelium. Cancer Res. 68: 8626-34.
- 10. Ciccocioppo, R. *et al.* (2011) Autologous bone marrow-derived mesenchymal stromal cells in the treatment of fistulising Crohn's disease. <u>Gut 60: 788-98.</u>
- 11. Cox, G. *et al.* (2011) The use of the reamer-irrigator-aspirator to harvest mesenchymal stem cells. J Bone Joint Surg Br. 93: 517-24.
- 12. Ferro, F. *et al.* (2010) Biochemical and biophysical analyses of tissue-engineered bone obtained from three-dimensional culture of a subset of bone marrow mesenchymal stem cells. Tissue Eng Part A 16: 3657-67.
- 13. Lozanoska-Ochser, B. *et al.* (2008) Expression of CD86 on human islet endothelial cells facilitates T cell adhesion and migration. J Immunol. 181: 6109-16.
- 14. Sallustio, F. *et al.* (2010) TLR2 plays a role in the activation of human resident renal stem/progenitor cells. FASEB J. 24: 514-25.
- 15. Tso, C. *et al.* (2012) Phenotypic and functional changes in blood monocytes following adherence to endothelium. <u>PLoS One 7: e37091.</u>
- 16. Hu, N. *et al.* (2013) Long-term outcome of the repair of 50 mm long median nerve defects in rhesus monkeys with marrow mesenchymal stem cells-containing, chitosan-based tissue engineered nerve grafts. Biomaterials 34: 100-11.
- 17. Cho, H.J. *et al.* (2013) Generation of human secondary cardiospheres as a potent cell processing strategy for cell-based cardiac repair. Biomaterials 34: 651-61.
- 18. Kang, S.D. *et al.* (2013) Isolation of Functional Human Endothelial Cells from Small Volumes of Umbilical Cord Blood. <u>Ann Biomed Eng. 41: 2181-92.</u>
- 19. Mehrkens, A. *et al.* (2013) Non-adherent mesenchymal progenitors from adipose tissue stromal vascular fraction. Tissue Eng Part A 20: 1081-8.
- 20. De Schauwer, C. *et al.* (2012) In search for cross-reactivity to immunophenotype equine mesenchymal stromal cells by multicolor flow cytometry. Cytometry A 81: 312-23.
- 21. Zhang, J. *et al.* (2016) Bone mesenchymal stem cells differentiate into myofibroblasts in the tumor microenvironment. <u>Oncol Lett. 12 (1): 644-50.</u>
- 22. Morsing, M. *et al.* (2016) Evidence of two distinct functionally specialized fibroblast lineages in breast stroma. <u>Breast Cancer Res. 18 (1): 108.</u>
- 23. Williamson, K.A. *et al.* (2015) Restricted differentiation potential of progenitor cell populations obtained from the equine superficial digital flexor tendon (SDFT). <u>J Orthop</u> Res. 33 (6): 849-58.
- 24. Lützkendorf, J. *et al.* (2017) Resistance for Genotoxic Damage in Mesenchymal Stromal Cells Is Increased by Hypoxia but Not Generally Dependent on p53-Regulated Cell Cycle Arrest. <u>PLoS One. 12 (1): e0169921.</u>
- 25. Lee, H.J. *et al.* (2017) ICOSL expression in human bone marrow-derived mesenchymal stem cells promotes induction of regulatory T cells. Sci Rep. 7: 44486.
- 26. Yi, T. *et al.* (2015) Manufacture of Clinical-Grade Human Clonal Mesenchymal Stem Cell Products from Single Colony Forming Unit-Derived Colonies Based on the Subfractionation Culturing Method. <u>Tissue Eng Part C Methods</u>. 21 (12): 1251-62.
- 27. Boccardo, S. *et al.* (2016) Engineered mesenchymal cell-based patches as controlled VEGF delivery systems to induce extrinsic angiogenesis. <u>Acta Biomater. 42: 127-35.</u>
- 28. Mumaw, J.L. et al. (2015) Feline mesenchymal stem cells and supernatant inhibit

- reactive oxygen species production in cultured feline neutrophils. Res Vet Sci. 103: 60-9.
- 29. Bertolo, A. *et al.* (2017) Oxidative status predicts quality in human mesenchymal stem cells. Stem Cell Res Ther. 8 (1): 3.
- 30. GarikipatiV, N.S. *et al.* (2018) Isolation and characterization of mesenchymal stem cells from human fetus heart. <u>PLoS One. 13 (2): e0192244.</u>
- 31. Olimpio, R.M.C. *et al.* (2018) Cell viability assessed in a reproducible model of human osteoblasts derived from human adipose-derived stem cells. PLoS One. 13 (4): e0194847.
- 32. Lotfi, R. *et al.* (2018) ATP promotes immunosuppressive capacities of mesenchymal stromal cells by enhancing the expression of indoleamine dioxygenase. <u>Immun Inflamm Dis. Oct 10 [Epub ahead of print].</u>
- 33. Santos, V.H.D. *et al.* (2019) Evaluation of alginate hydrogel encapsulated mesenchymal stem cell migration in horses. <u>Res Vet Sci. 124: 38-45.</u>
- 34. Noda, S. *et al.* (2019) Effect of cell culture density on dental pulp-derived mesenchymal stem cells with reference to osteogenic differentiation. <u>Sci Rep. 9 (1): 5430.</u>
- 35. Manini, I. *et al.* (2020) Heterogeneity Matters: Different Regions of Glioblastoma Are Characterized by Distinctive Tumor-Supporting Pathways. <u>Cancers (Basel). 12 (10) Oct 13 [Epub ahead of print].</u>
- 36. Cargnoni, A. *et al.* (2020) Amniotic MSCs reduce pulmonary fibrosis by hampering lung B-cell recruitment, retention, and maturation. <u>Stem Cells Transl Med. 9 (9): 1023-35.</u>
- 37. Huang, Q. *et al.* (2021) Human Umbilical Cord Mesenchymal Stem Cells-Derived Exosomal MicroRNA-18b-3p Inhibits the Occurrence of Preeclampsia by Targeting LEP. Nanoscale Res Lett. 16 (1): 27.
- 38. Piñeiro-Ramil, M. *et al.* (2020) Immortalizing Mesenchymal Stromal Cells from Aged Donors While Keeping Their Essential Features. Stem Cells Int. 2020: 5726947.
- 39. Kim, M. *et al.* (2020) A Small-Sized Population of Human Umbilical Cord Blood-Derived Mesenchymal Stem Cells Shows High Stemness Properties and Therapeutic Benefit. Stem Cells Int. 2020: 5924983.
- 40. Niu, C.C. *et al.* (2014) Identification of mesenchymal stem cells and osteogenic factors in bone marrow aspirate and peripheral blood for spinal fusion by flow cytometry and proteomic analysis. <u>J Orthop Surg Res. 9: 32.</u>
- 41. Supokawej, A. *et al.* (2013) Cardiogenic and myogenic gene expression in mesenchymal stem cells after 5-azacytidine treatment. <u>Turk J Haematol.</u> 30 (2): 115-21.
- 42. Kim, S.H. *et al.* (2019) Forkhead box O1 (FOXO1) controls the migratory response of Toll-like receptor (TLR3)-stimulated human mesenchymal stromal cells. <u>J Biol Chem. 294</u> (21): 8424-37.
- 43. Rey, F. *et al.* (2019) Adipose-Derived Stem Cells from Fat Tissue of Breast Cancer Microenvironment Present Altered Adipogenic Differentiation Capabilities. <u>Stem Cells Int.</u> 2019: 1480314.
- 44. Lotfi, R. *et al.* (2020) Validation of Microbiological Testing of Cellular Medicinal Products Containing Antibiotics. <u>Transfus Med Hemother. 47 (2): 144-51.</u>
- 45. Serrano, L.J. *et al.* (2021) Cell therapy for factor V deficiency: An approach based on human decidua mesenchymal stem cells. <u>Biomed Pharmacother.</u> 142: 112059.
- 46. Piñeiro-Ramil, M. *et al.* (2021) Generation of Mesenchymal Cell Lines Derived from Aged Donors. Int J Mol Sci. 22 (19)Oct 01 [Epub ahead of print].
- 47. Fernandez-Pernas, P. *et al.* (2017) CD105+-mesenchymal stem cells migrate into osteoarthritis joint: An animal model. PLoS One. 12 (11): e0188072.
- 48. Di Paola, A. et al. (2021) Eltrombopag in paediatric immune thrombocytopenia: Iron

metabolism modulation in mesenchymal stromal cells. Br J Haematol. Dec 28 [Epub ahead of print].

- 49. Murata, D. et al. (2022) Osteochondral regeneration of the femoral medial condyle by using a scaffold-free 3D construct of synovial membrane-derived mesenchymal stem cells in horses. BMC Vet Res. 18 (1): 53.
- 50. Orikasa, S. et al. (2022) Hypoxia-inducible factor 1α induces osteo/odontoblast differentiation of human dental pulp stem cells via Wnt/β-catenin transcriptional cofactor BCL9. Sci Rep. 12 (1): 682.
- 51. Freitag, N. et al. (2022) Eutopic endometrial immune profile of infertility-patients with and without endometriosis J Repro Immunol. 29 Jan: 103489 [Epub ahead of print].
- 52. Watson, L. et al. (2020) Administration of Human Non-Diabetic Mesenchymal Stromal Cells to a Murine Model of Diabetic Fracture Repair: A Pilot Study. Cells. 9 (6): 1394.
- 53. Creamer, D.G. et al. (2022) Influence of exposure to microbial ligands,

immunosuppressive drugs and chronic kidney disease on endogenous immunomodulatory gene expression in feline adipose-derived mesenchymal stem cells. J Feline Med Surg. : 1098612X221083074.

Further Reading

- 1. Burk, J. et al. (2013) Equine cellular therapy--from stall to bench to bedside? Cytometry A 83 (1): 103-13.
- 2. Carrade, D.D. et al. (2012) Comparative Analysis of the Immunomodulatory Properties of Equine Adult-Derived Mesenchymal Stem Cells. Cell Med. 4: 1-11.

Storage

Store at +4°C. DO NOT FREEZE.

This product should be stored undiluted.

Guarantee

12 months from date of despatch

Acknowledgements

This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign

counterparts

Health And Safety Information

Material Safety Datasheet documentation #20471 available at:

https://www.bio-rad-antibodies.com/SDS/MCA1557SBB765

20471

Regulatory

For research purposes only

Related Products

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

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