Mouse anti-CD105/Endoglin, clone E9 (Monoclonal)

Clone no. E9

MONOSAN

Product name	Mouse anti-CD105/Endoglin, clone E9 (Monoclonal)
Host	Mouse
Applications	IHC-fr,FC,ELISA,IP,WB
Species reactivity	human
Conjugate	-
Immunogen	Unknown or proprietery to MONOSAN and/or its suppliers
Isotype	IgG1
Clonality	Monoclonal
Clone number	E9
Size	1 ml
Concentration	100 ug/ ml
Format	-
Storage buffer	PBS with 0.1% BSA and 0.02% sodium azide
Storage until expiry date	2-8°C

FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES

Product datasheet MON3091

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Additional info

The monoclonal antibody E9 reacts with Endoglin, a 190 kDa homodimeric transmembrane glycoprotein composed of disulfide-linked subunits. The external domain binds TGF-beta1 and -beta3 isoforms with high affinity. Two different isoforms (L and S) of CD105 with capacity to bind TGF-beta have been characterized, which differ in the amino acid composition of their cytoplasmic tails. Mutations in the gene encoding endoglin have been linked to the human disease hereditary hemorrhagic telangiectasia type 1 (HHT1), a vascular disorder characterized by localized vascular dysplasia and a tendency towards arteriovenous malformations. Mice expressing a single CD105 allele develop external signs of disease similar to human HHT1, supporting the haploinsufficiency model for HHT1. Mice lacking endoglin die from defective angiogenesis characterized by failure of vascular smooth muscle investment of embryonic blood vessels, suggesting a defect in vascular smooth muscle cell development. Microvessel density (MVD) has been reported to be an independent prognostic indicator of outcome in a variety of human malignancies, with increased MVD correlating with shorter overall and relapse-free survival rates. The MVD counts using anti-CD105 antibody significantly correlated with overall and disease-free survival. Anti-CD105 monoclonal antibody E9 and anti-CD34 monoclonal antibody have been successfully used to quantify MVD in human breast carcinoma. The monoclonal antibody E9, directed against CD105, has also been used as a prognostic marker for primary central nervous system lymphomas.

References

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2. Pichuantes, S et al Tissue Antigens 1997, 50: 265
3. Kumar; S et al. Cancer Research 1999; 59: 856
4. Li C et al. Int J Cancer 2000; 89: 122
5. Li C et al. B J Cancer 2003; 88: 1424