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Product datasheet for DDX0390HD-01

Bst2 (Plasmacytoid Dendritic Cells / pDCs) Rat Monoclonal Antibody [Clone ID: 120G8.04]

Product data:

Product Type:	Primary Antibodies
Clone Name:	120G8.04
Applications:	FN
Recommend Dilution:	**DDX0390P-50 / DDX0390P-100 Purified:** FACS surface, ImmunoHistoChemistry frozen sections, *In vivo* depletion. **DDX0390A488-50 / DDX0390A488-100 Alexa-fluor®488:** FACS surface, ImmunoFluorescence.. **DDX0390A546-50 / DDX0390A546-100 Alexa-fluor®546:** ImmunoFluorescence. **DDX0390A647-50 / DDX0390A647-100 Alexa-fluor®647:** Flow Cytometry. **DDX0390B-50 / DDX0390B-100 Biotin:** FACS surface, ImmunoHistoChemistry frozen sections. **DDX0390-HD01 1 mg Purified:** *In vivo* Depletion. **DDX0390-HD05 5 mg Purified:** *In vivo* Depletion. **DDX0390-HD10 10 mg Purified:** *In vivo* Depletion. **Usage recommendation:** This monoclonal antibody may be used between at 1-10 µg/ml. For pDCs *in vivo* depletion in Balb /c mice, mAb 120G8 was used between 50-200 µg / injection. Optimal dilution should be determined by each laboratory for each application.
Reactivity:	Mouse
Host:	Rat
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Mouse plasmatocytoid DCs (pDCs)
Specificity:	Mouse pDCs/IFN producing cells (IPC) (extracellular domain). **Species cross-reactivity:** nd
Formulation:	**Purified:** 100 µg in 200µl / 50 µg in 100 µl / 1 mg in 2ml Tris-NaCl pH8. **Coupled:** 100 µg in 200µl / 50 µg in 100 µl PBS 50% glycerol. State: Azide Free

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Concentration: 0.5 mg/ml

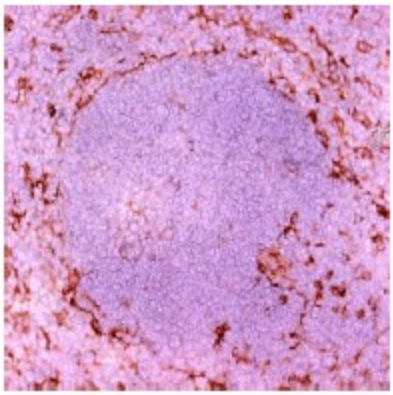
Gene Name: bone marrow stromal cell antigen 2

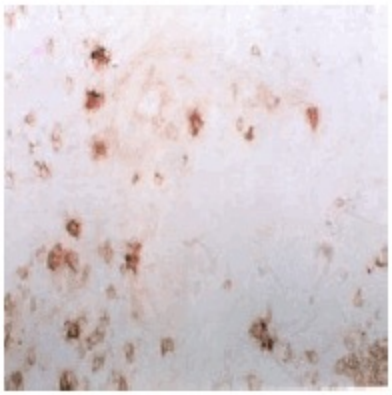
Database Link: Entrez Gene 69550 Mouse

Background: We generated rat monoclonal antibody (mAb) that recognizes mouse plasmacytoid dendritic cells (pDCs). The target molecule was found to be BST2 (bone marrow stromal cell antigen 2). This antibody, named 120G8, stains a small subset of $CD11c^{low}$ spleen cells with high specificity. This population produces high amounts of IFNα upon *in vitro* viral stimulation. Both *ex vivo*- and *in vitro*-derived 120G8+ cells display a phenotype identical with that of mouse pDCs ($B220^{high}Ly6C^{high}Gr1^{low}CD11b\text{-}CD11c^{low}$). Mice treated with 120G8 mAb are depleted of $B220^{high}Ly6C^{high}CD11c^{low}$ cells and have a much reduced ability to produce IFN in response to in vivo CpG stimulation. mAb 120G8 stains all and only $B220^{high}Ly6C^{high}CD11c^{low}$ pDC in all lymphoid organs. Immunohistochemical studies performed with this mAb indicate that pDC are located in the T cell area of spleen, lymph nodes, and Peyer's patches. Using 120G8 mAb in immunofluorescence studies demonstrates mouse strain- and organ-specific differences in the frequency of pDCs and other DC subsets *(Asselin-Paturel C et al, 2003 ; J. Immunol., 172:6466; Blasius Al, 2006, J. Immunol., 177:3260 ; Goubier A et Al, 2008, Immunity, 29:464-475).*

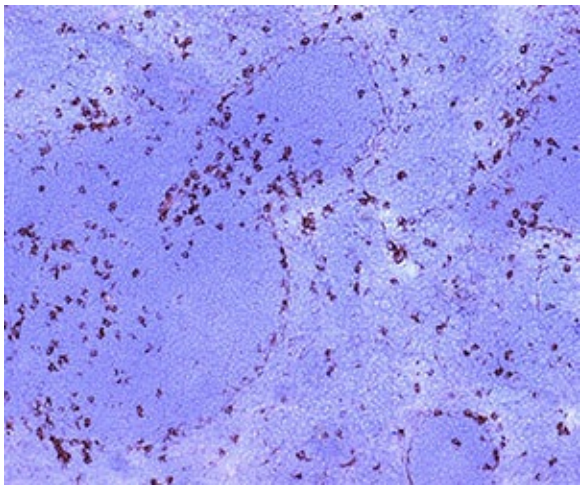
Synonyms: Bone marrow stromal antigen 2, BST-2, Tetherin, HM1.24 antigen

Product images:

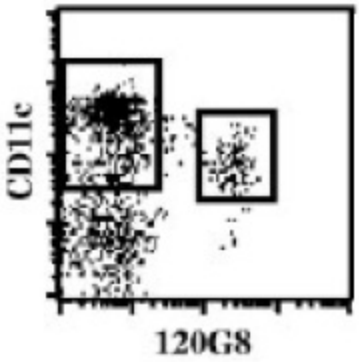




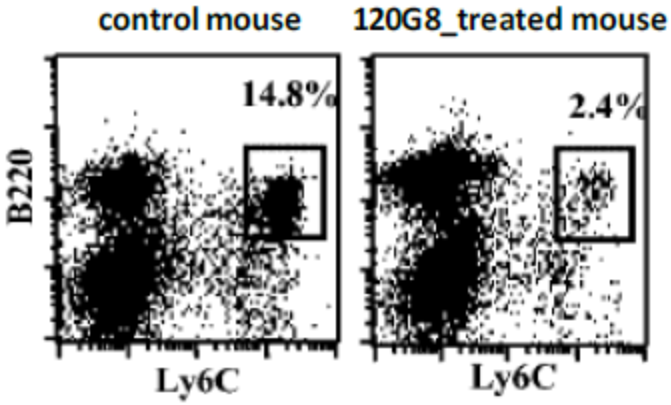
IHC staining of murine spleen cryosections



IHC staining of mouse spleen frozen section with clone 120G8 (DX0390)



Facs sorting of mouse PDCs (120G8/CD11c)



In vivo depletion of mouse PDCs (gated on CD11c+CD3- cells)