

Mouse Anti-IL-18 [MD339]: MC0049, MC0049RTU7

Intended Use: For Research Use Only

Description: Four structurally related IL-1 receptor ligands have been described. These include three agonists designated IL-1 α , IL-1 β and IL-1 γ /IL-18 and a specific receptor antagonist, IL-1Ra. IL-1 α and IL-1 β play critical roles in the regulation of the immune response and inflammation, serving as activators of T and B lymphocytes and NK (natural killer) cells. IL-18 (also known as IL-1 γ) has been shown to augment the secretion of IFN- γ from T lymphocytes and increase NK cell activity in spleen cells. IL-18 exhibits 19% and 12% identity with IL-1 α and IL-1 β respectively over the 12 β -strands of the β -trefoil fold domain, which is a signature feature of the IL-1 family. The unusual leader sequence of IL-18 may be analogous to the IL-1 β pro-domain which must be cleaved by the serine protease ICE for optimal secretion and biological activity. Originally described as IGIF (IFN- γ -inducing factor), IL-18 is induced by mouse liver subsequent to challenge with lipopolysaccharide (LPS).

Specifications

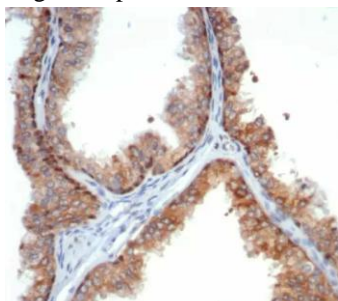
Clone:	MD339
Source:	Mouse
Isotype:	IgG1
Reactivity:	Human
Immunogen:	Human Fetuin A protein aa 68-367
Localization:	Secreted
Formulation:	Antibody in PBS pH7.4, containing BSA and \leq 0.09% sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC
Package:	

Description	Catalog No.	Size
IL-18 [MD339] Concentrated	MC0049	1 ml
IL-18 [MD339] Prediluted	MC0049RTU7	7 ml

IHC Procedure*

Positive Control Tissue:	Heart, adrenal gland
Concentrated Dilution:	50-200
Pretreatment:	Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human prostate stained with anti-IL-18 using DAB

References:

1. Collagen type I-mediated mechanotransduction controls epithelial cell fate conversion during intestinal inflammation. Kobayashi S, et al. *Inflamm Regen* 42:49, 2022.
2. Activation of the Nlrp3 inflammasome in infiltrating macrophages by endocannabinoids mediates beta cell loss in type 2 diabetes. Tony Jourdan, et al. *Nat Med.* Sep;19(9):1132-40, 2013.
3. Human chromosome 11 DNA sequence and analysis including novel gene identification. Todd D Taylor, et al. *Nature.* Mar 23;440(7083):497-500, 2006.