

Del-Immune V®

Pure research Products, LLC, USA

Del-Immune V®

Lactobacillus rhamnosus V.

25

!

:3

!

Del-Immune V®

Del-Immune V®

()

Del-Immune V®

Th1 Th2

Del-Immune V®

(IL-1), tumor necrosis factor (TNF-alpha), IL-2, IL-6, IL-8, IL-12 and interferon gamma (IFN-gamma),

Th1 Th2 .

:

-IL-1 -

; IL-1 ,

IL-1 : IL1 alpha IL1 beta,
IL1 alpha
IL1 beta

() .

of adrenal gland,

IL-1

IL-1

(NK cells),

IL-1

(Th1);

- IL-2 -

-Regs (Regulatory T cells),
("self-antigens"),

« « « «

,NK-

Th1

IL-2

24-48

IL-2

IL-2 .

IL-2 ,

IL-2

-IL-6 -

Th2

IL-6
 IL-6
 ()
 IL-6
 PAMPs (« pathogen-associated molecular patterns - PAMP),
 like receptors) (TLR (Toll-like receptors))
 (myokine) – (constriction).

-IL-8 –
 – Neutrophil Chemotactic Factor.

-IL-12 -
 Th1
 NK
 gamma,
 IL-12
 IL-12 NK (IL-2 beta1 beta2). IL-12
 anti-cancer drug.
 Th1
 IFN-gamma TNF-alpha
 IL-4, IFN-
 NK
 NK NK
 CD8
 IL-2
 antiangiogenic activity,

- IFN-gamma – Th1 – CD4+ CD8
 NK
 NK
 (anti-microbial and anti-tumor effects),
 IgG2a

Histocompatibility complex).
 IgE, G1, G2 G3 (IL 4).
 II (MHC – Major
 IL-1 IL-2.
 - TNF-alpha - NK
 Th1
 -I;

IL-1.

(LPS)

TNF, upregulate VIH

Del-Immune V®.

1

Del-Immune V®,

1

Del-Immune V®,

2

Del-Immune V®

6

6

Del-Immune V

8

12

(IFN-gamma& TFN-alpha)

4,

(IFN-

gamma.

Immune V® IFN-gamma Del-

TFN-alpha

Del-Immune V®

Multiple Sclerosis (MS) Lupus.

NB: MS (), Del-Immune V®

Del-Immune V®

Del-Immune V®,

6

-2
2

- 2 3

6-8
Del-Immune V®

(Del-Immune V®) -pathogen -
associated molecular patterns

(PRR – Pattern recognition receptors),

Del-Immune V®

Del-Immune V®

Del-Immune V®

Lactobacillus rhamnosus V.

Th1

Th2

Th1

Th2

(Natural

Killer and Cytotoxic T cell Flow Cytometric Profile , Becton Dicenson Dual Laser FACS
Calibur, TIBURON Diagnostic Laboratories, Tucsan ,AZ, USA)

Del-Immune V®

2002

U.S. Food and Drug Administration

(July 15, 2002, 21 U.S.C. 350b (a)(2))

Del-Immune V®

(United States Patent and Trademark Office, Reg.No. 3,023,625. Registered Dec.6,

2005)
 USA , www.del-immune.com)

Pure Research Products, LLC (Boulder, Colorado,

	()
<p>–pathogen – associated molecular patterns ()</p>	
	()
	(TCR) - (BCR) -
-	3-5 -