

Cytokine clusters (biological classification)

Name	chemokine	colony stimulating factor	growth factor	interferon	interleukin	tumor necrosis factor	Checkpoint
BDNF			TRUE				
EGF			TRUE				
Eotaxin	TRUE						
FGF-2			TRUE				
GM-CSF		TRUE					
GRO-alpha	TRUE						
HGF			TRUE				
IFN-alpha				TRUE			
IFN-gamma				TRUE			
IL-10					TRUE		
IL-12p70					TRUE		
IL-13					TRUE		
IL-15					TRUE		
IL-17A					TRUE		
IL-18					TRUE		
IL-1alpha					TRUE		
IL-1beta					TRUE		
IL-1RA					TRUE		
IL-2					TRUE		
IL-21					TRUE		
IL-22					TRUE		
IL-23					TRUE		
IL-27					TRUE		
IL-31					TRUE		
IL-4					TRUE		
IL-5					TRUE		
IL-6					TRUE		
IL-7					TRUE		
IL-8	TRUE				TRUE		
IL-9					TRUE		
IP-10	TRUE						
LIF			TRUE				
MCP-1	TRUE						
MIP-1alpha	TRUE						
MIP-1beta	TRUE						
NGF-beta			TRUE				
PDGF-BB			TRUE				
PIGF-1			TRUE				
RANTES	TRUE						
SCF		TRUE					
SDF-1alpha	TRUE						
TNF-alpha						TRUE	
TNF-beta						TRUE	
VEGF-A			TRUE				

VEGF-D			TRUE				
BTLA							TRUE
IDO							TRUE
LAG-3							TRUE
PD1							TRUE
PD-L1							TRUE
PD-L2							TRUE
TIM-3							TRUE
CD152							TRUE
GITR							TRUE
HVEM							TRUE
CD28							TRUE
CD80							TRUE
CD137							TRUE
CD27							TRUE

Functional characterization (related to the immunity cycle)					T helper (Th) cells related cytokine subclasses			
Cancer antigen presentation	Priming and activation	Trafficking of T cells to tumors	Infiltration of T cells into tumors	Killing of cancer cells	Th1	Th17	Th2	Th9/Th17/Th22/Treg
					TRUE			
TRUE								
				TRUE	TRUE			
TRUE							TRUE	TRUE
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TRUE							TRUE	
	TRUE				TRUE			
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TRUE					TRUE			
			TRUE					

