



Goat Anti-Human IL-12/IL-23 p40 Polyclonal Antibody (DPAB1223-3221F)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Goat Polyclonal Antibody to Human IL-12/IL-23 p40
Antigen Description	Interleukin 23 (IL-23) is a heterodimeric cytokine composed of two disulfide-linked subunits, a p19 subunit that is unique to IL-23, and a p40 subunit that is shared with IL-12. The p19 subunit has homology to the p35 subunit of IL-12, as well as to other single chain cytokines such as IL-6 and IL-11. The p40 subunit is homologous to the extracellular domains of the hematopoietic cytokine receptors. Human p19 cDNA encodes a 189 amino acid residue (aa) precursor protein with a putative 19 aa signal peptide and 170 aa mature protein. Human and mouse p19 share 70% aa sequence identity. Although p19 is expressed by activated macrophages, dendritic cells, T cells, and endothelial cells, only activated macrophages and dendritic cells express p40 concurrently to produce IL-23. The functional IL-23 receptor complex consists of two receptor subunits, the IL-12 receptor beta 1 subunit (IL-12 Rβ1) and the IL-23-specific receptor subunit (IL-23 R). IL-23 has biological activities that are similar to, but distinct from IL-12. Both IL-12 and IL-23 induce proliferation and IFN-γ production by human T cells. While IL-12 acts on both naïve and memory human T cells, the effects of IL-23 is restricted to memory T cells. In mouse, IL-23 but not IL-12, has also been shown to induce memory T cells to secrete IL-17, a potent proinflammatory cytokine. IL-12 and IL-23 can induce IL-12 production from mouse splenic DC of both the CD8- and CD8+ subtypes, however only IL-23 can act directly on CD8+ DC to mediate immunogenic presentation of poorly immunogenic tumor/self peptide.
Specificity	Detects human IL-12/IL-23 p40 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human IL-23 p19 and recombinant mouse IL-23 p19 was observed.
Species	Human
Conjugate	Unconjugated
Applications	WB, Neut
Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.

Format	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.
Preservative	None
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 1. 12 months from date of receipt, -20°C to -70°C as supplied. 2. 1 month, 2°C to 8°C under sterile conditions after reconstitution. 3. 6 months, -20°C to -70°C under sterile conditions after reconstitution.
Ship	The product is shipped at ambient temperature.