Anti-IL-22 Antibody

ER1803-85

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	ELISA, WB, IHC-P
Molecular Wt:	20 kDa

Description: IL-22 a member of a group of cytokines called the IL-10 family or IL-10 superfamily (including IL-19, IL-20, IL-24, and IL-26), a class of potent mediators of cellular inflammatory responses. It shares use of IL-10R2 in cell signaling with other members of this family, IL-10, IL-26, IL-28A/B and IL-29. IL-22 is produced by activated NK and T cells and initiates innate immune responses against bacterial pathogens especially in epithelial cells such as respiratory and gut epithelial cells. IL-22 along with IL-17 is rapidly produced by splenic LTi-like cells and also produced by Th17 cells and likely plays a role in the coordinated response of both adaptive innate immune systems, autoimmunity and tissue regeneration. IL-22 biological activity is initiated by binding to a cell-surface complex composed of IL-22R1 and IL-10R2 receptor chains. IL-22 and IL-10 receptor chains play a role in cellular targeting and signal transduction to selectively initiate and regulate immune responses. IL-22 can contribute to immune disease through the stimulation of inflammatory responses, S100s and defensins. IL-22 also promotes hepatocyte survival in the liver and epithelial cells in the lung and gut similar to IL-10. In some contexts, the pro-inflammatory versus tissue-protective functions of IL-22 are regulated by the often co-expressed cytokine IL-17A.

Immunogen:	Recombinant protein within human IL-22 aa 34-179.
Positive control:	Rat kidney tissue, human tonsil tissue, human breast cancer tissue, mouse colon tissue.
Subcellular location:	Secreted.
Database links:	SwissProt: Q9GZX6 Human | Q9JJY9 Mouse Entrez Gene: 500836 Rat

Recommended Dilutions:

ELISA	1:5000-1:10,000
WB	1:500
IHC-P	1:50-1:200

Storage Buffer:	1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.
Storage Instruction:	Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.
Purity:	Protein A affinity purified.

Images

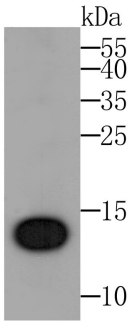

Fig1: Western blot analysis of IL-22 on IL22 recombinant protein. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody was used at a 1:500 dilution in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:5,000 dilution was used for 1 hour at room temperature.

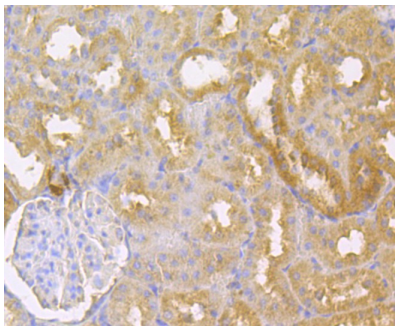

Fig2: Immunohistochemical analysis of paraffin-embedded rat kidney tissue using anti-IL-22 antibody. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the antibody (ER1803-85) at 1/200 dilution, for 30 minutes at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chrogen. Counter stained with hematoxylin and mounted with DPX.

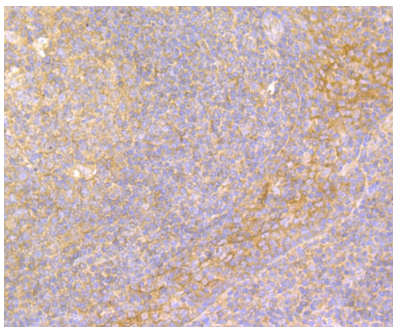

Fig3: Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-IL-22 antibody. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the antibody (ER1803-85) at 1/200 dilution, for 30 minutes at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chrogen. Counter stained with hematoxylin and mounted with DPX.

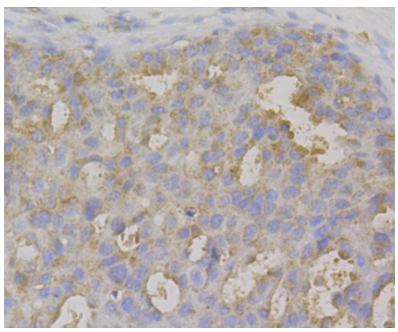

Fig4: Immunohistochemical analysis of paraffin-embedded human breasr cancer tissue using anti-IL-22 antibody. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the antibody (ER1803-85) at 1/200 dilution, for 30 minutes at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chrogen. Counter stained with hematoxylin and mounted with DPX.

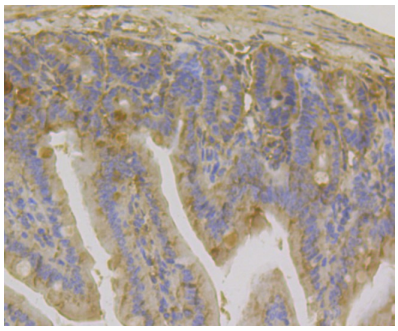

Fig5: Immunohistochemical analysis of paraffin-embedded mouse colon tissue using anti-IL-22 antibody. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the antibody (ER1803-85) at 1/200 dilution, for 30 minutes at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chrogen. Counter stained with hematoxylin and mounted with DPX.

Background References

1. Zhang Z et al. Signal peptide prediction based on analysis of experimentally verified cleavage sites. Protein Sci 13:2819-2824 (2004).
2. Jones B C et al. Structure of IL-22 bound to its high-affinity IL-22R1 chain. Structure 16:1333-1344 (2008).