

Summary

Production Name	Lipocalin-2 (19M14) Rabbit Monoclonal Antibody
Description	Rabbit Monoclonal Antibody
Host	Rabbit
Application	WB,IHC-P,ICC/IF,IF-P
Reactivity	Human

Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type
Buffer	preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term.
	Avoid freeze / thaw cycle.
Purification	Affinity purification

Immunogen

Gene Name	LCN2
Alternative Names	LCN2; 24p3; MSFI; NGAL; Lipocalin-2; p25; Siderocalin; SV40 induced 24P3 protein;
	Uterocalin;
Gene ID	3934.0
SwissProt ID	P80188.

Application

Dilution Ratio	WB 1:1000-1:5000, IHC-P/IF-P 1:100-1:200, ICC/IF 1:100-1:200
Molecular Weight	23kDa

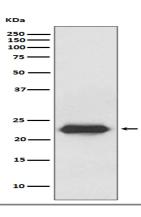


Background

Lipocalin-2 is involved in innate immunity, iron homeostasis, and apoptosis. Lipocalin-2 limits bacterial growth by binding to bacterial siderophores and sequestering iron. Binds iron through association with 2,5-dihydroxybenzoic acid (2,5-DHBA), a siderophore that shares structural similarities with bacterial enterobactin, and delivers or removes iron from the cell, depending on the context. Iron-trafficking protein involved in multiple processes such as apoptosis, innate immunity and renal development (PubMed:12453413, PubMed:27780864, PubMed:20581821). Binds iron through association with 2,3-dihydroxybenzoic acid (2,3-DHBA), a siderophore that shares structural similarities with bacterial enterobactin, and delivers or removes iron from the cell, depending on the context. Iron-bound form (holo-24p3) is internalized following binding to the SLC22A17 (24p3R) receptor, leading to release of iron and subsequent increase of intracellular iron concentration. In contrast, association of the iron- free form (apo-24p3) with the SLC22A17 (24p3R) receptor is followed by association with an intracellular siderophore, iron chelation and iron transfer to the extracellular medium, thereby reducing intracellular iron concentration. Involved in apoptosis due to interleukin-3 (IL3) deprivation: iron-loaded form increases intracellular iron concentration without promoting apoptosis, while iron-free form decreases intracellular iron levels, inducing expression of the proapoptotic protein BCL2L11/BIM, resulting in apoptosis (By similarity). Involved in innate immunity; limits bacterial proliferation by sequestering iron bound to microbial siderophores, such as enterobactin (PubMed: 27780864). Can also bind siderophores from M.tuberculosis (PubMed:15642259, PubMed:21978368).

Research Area

Image Data





Western blot analysis of Lipocalin-2 expression in SW480 cell lysate.

Note

For research use only.