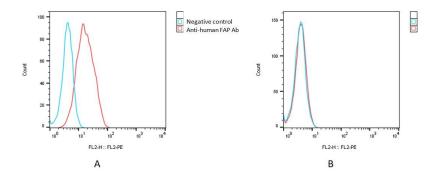


SPECIFICATIONS

Catalog Number	C3093
Cell Line Name	Human FAP-CHO-K1 stable cell line
Accession Number	NM_004460.5
Host Cell	Adherent CHO-K1
Quantity	Two vials of frozen cells $(2x10^6 \text{ per vial})$
Culture Medium	DMEM with 10% FBS, 4µg/ml puromycin
Freezing Medium	90% FBS and 10% DMSO
Storage	Liquid nitrogen

DATA

Detection of human FAP expression on human FAP-CHO-K1 stable cells (A) and Vector Control-CHO-K1 cells (B) using a monoclonal antibody specific for human FAP (Invitrogen #BMS168), followed by staining with PE-anti mouse antibody.



BACKGROUND

Fibroblast Activation Protein (FAP) is a type II integral membrane glycoprotein and a member of the serine protease family. FAP plays a critical role in tissue remodeling, wound healing, and fibrosis due to its ability to degrade components of the extracellular matrix (ECM), such as gelatin and type I collagen. FAP is transiently expressed by activated fibroblasts in normal tissues during wound healing and inflammation. FAP is expressed at low or undetectable levels in most adult tissues. It is mainly upregulated in situations of tissue injury and fibrosis, where fibroblasts are activated. FAP is highly expressed in cancer-associated fibroblasts (CAFs), where it contributes to the remodeling of the tumor stroma, promoting tumor growth, invasion, and metastasis. The expression of FAP is restricted to the tumor stroma, particularly in cancer-associated fibroblasts (CAFs), and is rarely found in the tumor cells themselves. Its presence is associated with poor prognosis, enhanced tumor aggressiveness, and immune evasion, as FAP plays a role in modulating the tumor microenvironment (TME). Given its limited expression in normal tissues and its strong association with tumor stroma, FAP is an attractive therapeutic target including strategies like FAP-targeted antibodies, small molecule inhibitors, and FAP-specific immunotherapies.

References

Wu Y, Wu C, Shi T, et al. FAP expression in adipose tissue macrophages promotes obesity and metabolic inflammation. *Proc Natl Acad Sci U S A*. **120(51)**:e2303075120. 2023.

Cai J, Yang D, Sun H, et al. A multifactorial analysis of FAP to regulate gastrointestinal cancers progression. Front Immunol. 14:1183440. 2023.

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