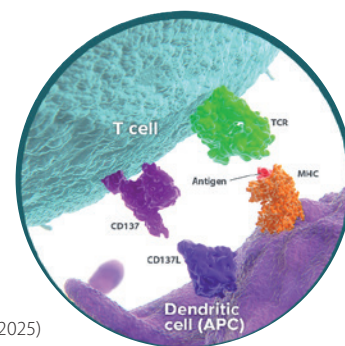


CD137/CD137L Pathway Signaling

CD137 (4-1BB; TNFRSF9) is an activating receptor binding to CD137L (4-1BBL; TNFSF9). Because CD137 is expressed on both natural killer (NK) cells and T cells, it can trigger both innate and adaptive immunity. After these cells have been activated by exposure to tumor antigen, CD137 signals stimulate them to reproduce and to generate antitumor activity. CD137 has been shown to play a critical role on T cells in the development of immune memory and the creation of a durable immune response. On lymphocytes, the presence of CD137 appears to be a marker for tumor reactivity. Activation of CD137 signaling can stimulate both cytotoxic T cell and NK cell activity and generate a lasting memory response. Bidirectional CD137/CD137L signaling also plays an important role in the pathogenesis of autoimmune diseases.

SELECTED REVIEWS: New emerging targets in cancer immunotherapy: CD137/4-1BB costimulatory axis: I. Ettxeberria, et al.; ESMO Open 4, e000733 (2020) • CD137-expressing regulatory T cells in cancer and autoimmune diseases: K.Y. Lee, et al.; Mol. Ther. 33, 51 (2025)



Related Recombinant Proteins and Antibodies

PROTEINS	PID	SIZE	SOURCE	ENDOTOXIN	SPECIES
CD137 (mouse):Fc (human) (rec.)	AG-40A-0025	50 µg	HEK 293 cells	<0.1EU/µg	Ms
CD137 (human) (rec.) (His)	CHI-HR-200CD137	25 µg	E. coli	<0.1EU/µg	Hu
CD137 (human):Fc (human) (rec.)	AG-40B-0060	50 µg 3 x 50 µg	HEK 293 cells	<0.01EU/µg	Hu
CD137 (human):Fc (human) (rec.)	CHI-HF-210CD137	100 µg	CHO cells	<0.06EU/µg	Hu
CD137 (human):Fc (mouse) (rec.)	CHI-HF-211CD137	100 µg	HEK 293 cells	<0.005EU/µg	Ms
CD137L, Soluble (mouse) (rec.)	AG-40A-0020Y	50 µg	HEK 293 cells	<0.01EU/µg	Ms
CD137L, Soluble (human) (rec.)	AG-40A-0198T	50 µg	HEK 293 cells	<0.06EU/µg	Hu
Fc (human):CD137L, Soluble (human) (rec.)	AG-40B-0173	10 µg 3 x 10 µg	HEK 293 cells	<0.01EU/µg	Hu
CD137L (human)-muCD8 Fusion Protein	ANC-503-020	25 µg	CHO cells	n.d.	Hu
ANTIBODIES	PID	SIZE	ISOTYPE	APPLICATION	SPECIES
anti-CD137 (human), mAb (4B4-1)	ANC-360-020	100 µg	Mouse IgG1κ	FACS, FUNC	Hu, Mk
anti-CD137 (human), pAb	AG-25A-0018	100 µg	Rabbit	FACS, WB	Hu
anti-CD137 (mouse), mAb (M4173)	AG-20A-0072	50 µg	Rat IgG1κ	FACS, WB	Ms
anti-CD137L (human), mAb (41B436)	AG-20A-0031	50 µg 100 µg	Mouse IgG1κ	FACS, ICC, WB	Hu
anti-CD137L (human), mAb (ANC5D6)	ANC-365-020	100 µg	Mouse IgG2aκ	FACS, WB	Hu

IHC GRADE

anti-CD137 (4-1BB) (human), Rabbit Monoclonal (RM471)

REV-31-1363-00

100 µl

FIGURE: IHC staining of FFPE Hodg-kin's lymphoma tissue section using Clone RM471 at a 1:100 dilution.

