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Product datasheet

Recombinant human DLL4 protein (Fc Chimera Active) ab108557

7 References　画像数 6

製品の詳細

製品名	Recombinant human DLL4 protein (Fc Chimera Active)
生理活性	Inhibits adipogenesis of 3T3L-1 cells and mesenchymal stem cells (MSCs). Induces the Notch target gene HES-1 when coated on a plate at 1µg/ml.
精製度	>= 95 % SDS-PAGE. Purified using affinity chromatography.
エンドトキシン・レベル	< 0.010 Eu/µg
発現系	HEK 293 cells
アクセッション番号	Q9NR61
タンパク質長	Protein fragment
Animal free	No
由来	Recombinant
生物種	Human
予測される分子量	80 kDa including tags
領域	1 to 529
タグ	Fc tag C-Terminus
配列の追加情報	Signal peptide and extracellular domain of human DLL4 (aa 1-529) are fused at the C-terminus to the Fc portion of human IgG1.

特性

Our **Abpromise guarantee** covers the use of **ab108557** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション	Functional Studies SDS-PAGE
製品の状態	Lyophilized
備考	ab108557 interacts with Human Notch1 (as confirmed by Flow Cytometry).

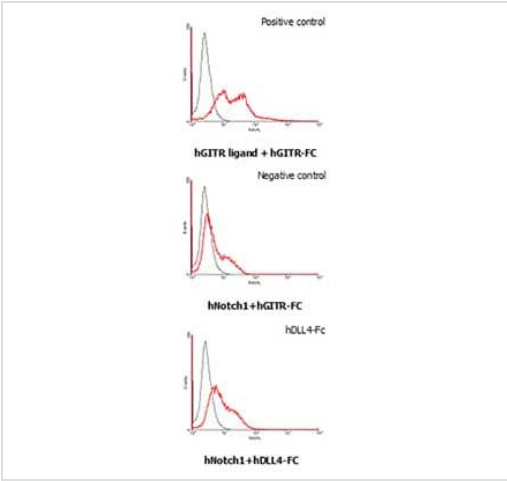
前処理および保存

保存方法および安定性	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. Constituents: PBS, 0.5% Trehalose ab108557 is 0.2 µm filtered. This product is an active protein and may elicit a biological response in vivo, handle with caution.
再構成	Reconstitute with 100µl sterile water. PBS containing at least 0.1% BSA should be used for further dilutions. Working aliquots are stable for up to 3 months when stored at -20°C.

関連情報

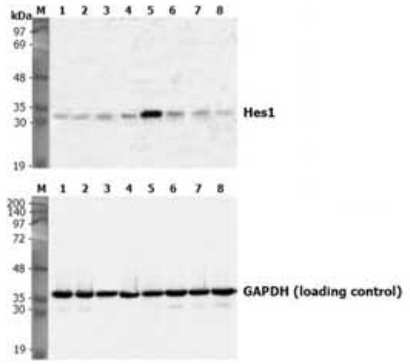
機能	Plays a role in the Notch signaling pathway. Activates Notch-1 and Notch-4.
組織特異性	Expressed in vascular endothelium.
配列類似性	Contains 1 DSL domain. Contains 8 EGF-like domains.
ドメイン	The Delta-Serrate-Lag2 (DSL) domain is required for binding to the Notch receptor.
翻訳後修飾	Ubiquitinated by MIB (MIB1 or MIB2), leading to its endocytosis and subsequent degradation.
細胞内局在	Membrane.

画像



Functional Studies - Recombinant human DLL4 protein (Fc Chimera Active) (ab108557)

Interaction of Human Notch1 with Human DLL4.
HEK293 cells transfected with a Human Notch1 or a Human GITR ligand expressing vector were incubated with 25 µg/ml of Human GITR-Fc or ab108557. Cells were stained with anti-Human IgG (Fc specific) FITC conjugate for DLL4-Fc binding.

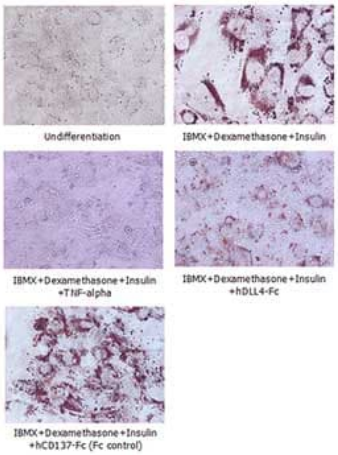


Functional Studies - Recombinant human DLL4 protein (Fc Chimera Active) (ab108557)

Induction of Hes-1 with the treatment of recombinant Human DLL4-Fc (ab108557).

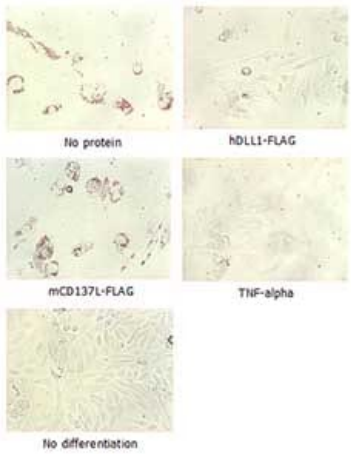
A Mouse preadpipocyte cell line, 3T3L-1, was stimulated with 5 µg/ml of Human DLL4-Fc as in indicated time points and each cell lysate was prepared and subjected to western blot by using anti-Mouse Hes1 or GAPDH.

M: Marker.
Lane 1: hDLL4-Fc, 0 min.
Lane 2: hDLL4-Fc, 10 min.
Lane 3: hDLL4-Fc, 30 min.
Lane 4: hDLL4-Fc, 1 hr.
Lane 5: hDLL4-Fc, 2 hr.
Lane 6: hDLL4-Fc, 4 hr.
Lane 7: hDLL4-Fc, 8 hr.
Lane 8: hDLL4-Fc, 24 hr.



Functional Studies - Recombinant human DLL4 protein (Fc Chimera Active) (ab108557)

Adipogenesis inhibition of 3T3L-1 cells.
3T3L-1 cells (mouse pre-adipocyte cells) were maintained in DMEM, supplemented with 10% fetal bovine serum and penicillin-streptomycin. For differentiation of 3T3L-1 cells, 3T3L-1 cells were cultured in adipogenic medium which was growth medium supplemented with 1 µM Dexamethasone, 0.5 mM IBMX, 10 µg/ml Insulin (day 0). Medium was changed every 2 days. Staining with Oil Red O was typically performed on day 7. Cells were washed twice with PBS, fixed with 3.7% formalin, and stained with 0.5% filtered Oil Red O in propylene glycol. For negative controls, mouse TNF-α (20 ng/ml) was added. Recombinant Human DLL4-Fc (ab108557) (5 µg/ml) dissolved in DPBS was added to the differentiation medium. These plates were then used to differentiate 3T3L-1 cells.

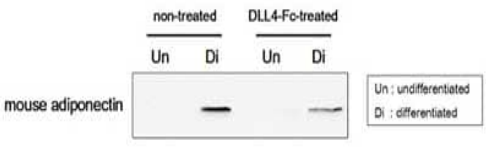


Functional Studies - Recombinant human DLL4 protein (Fc Chimera Active) (ab108557)

Adipogenesis inhibition of MSCs.
MSCs (Mesenchymal stem cells) were maintained in DMEM, supplemented with 10% fetal bovine serum, penicilinstreptomycin and glutamine. For differentiation of MSCs, MSCs were cultured in adipogenic medium which was growth medium supplemented with 1 µM Dexamethasone, 0.5mM IBMX, 10 µg/m Insulin, 100 µM Indomethacin (day 1). Medium was changed every 3 days. Staining with Oil Red O was typically performed on day 30. For negative controls, TNF-α (20 ng/ml) was added. To immobilize Notch ligands on the plastic surface of the culture plates, plates were incubated with a solution of ab108557 (5 µg/ml) or mCD137-Fc (5 µg/ml) in PBS for 2 hours at 37°C. Plates were then used to differentiate MSCs.

Functional Studies - Recombinant human DLL4 protein (Fc Chimera Active) (ab108557)

Adipogenesis inhibition of 3T3L-1 cells.



Functional Studies - Recombinant human DLL4 protein (Fc Chimera Active) (ab108557)

50 µg of cell lysates derived from hDLL4-Fc (ab108557) or non-treated 3T3L-1 cells, which had been either differentiated or undifferentiated, and were subjected to Western blot by using a Mouse adiponectin antibody.

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