

Product Data Sheet

Screening Libraries

Proteins

Inhibitors

Fc gamma RIIA/CD32a Protein, Human (183a.a, H167R, HEK293, His)

Cat. No.: HY-P70478

Synonyms: Low Affinity Immunoglobulin Gamma Fc Region Receptor II-a; IgG Fc receptor II-a; CDw32; Fc-

Gamma RII-a; Fc-Gamma-RIIa; FcRII-a; CD32; FCGR2A; CD32; FCG2; FCGR2A1; IGFR2

Species: Human Source: **HEK293**

Accession: P12318 (A36-I218, H167R)

Gene ID: 2212

Molecular Weight: 27-32 kDa

PROPERTIES

AA	Sec	uen	ce

AAPPKAVLKL	EPPWINVLQE	DSVTLTCQGA	RSPESDSIQW
FHNGNLIPTH	TQPSYRFKAN	NNDSGEYTCQ	TGQTSLSDPV
$H\;L\;T\;V\;L\;S\;E\;W\;L\;V$	LQTPHLEFQE	GETIMLRCHS	WKDKPLVKVT
FFQNGKSQKF	SHLDPTFSIP	QANHSHSGDY	HCTGNIGYTL

FSSKPVTITV OVPSMGSSSP MGI

Biological Activity

Immobilized Human CD32a at 10 µg/mL (100 µL/well) can bind Biotinylated Human IgG1 protein. The ED₅₀ for this effect is $0.7182 \mu g/mL$, corresponding to a specific activity is $1.39 \times 10^3 Unit/mg$.

Appearance

Lyophilized powder.

Formulation

Lyophilized from a 0.2 µm filtered solution of 20 mM PB, 150 mM NaCl, pH 7.4.

Endotoxin Level

<1 EU/µg, determined by LAL method.

Reconsititution

It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH₂O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).

Storage & Stability

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping

Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

The Fc gamma RIIA/CD32a protein assumes a pivotal role by specifically binding to the Fc region of immunoglobulins gamma, functioning as a low-affinity receptor. Through its interaction with IgG, Fc gamma RIIA/CD32a initiates cellular responses against pathogens and soluble antigens, illustrating its crucial involvement in immune modulation. Notably, the protein promotes the phagocytosis of opsonized antigens, further contributing to immune defense mechanisms.

Additionally, Fc gamma RIIA/CD32a engages in interactions with IGHG1, INPP5D/SHIP1, INPPL1/SHIP2, APCS, FGR, and HCK, indicating its participation in intricate signaling pathways and the regulation of its cellular functions. These multifaceted interactions underscore the significance of Fc gamma RIIA/CD32a in orchestrating diverse immune responses.

Caution: Product has not been fully validated for medical applications. For research use only.

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