

## G6B Protein, Human (HEK293, His)

Cat. No.:	HY-P75785
Synonyms:	Megakaryocyte and platelet inhibitory receptor G6b; Protein G6b; MPIG6B; C6orf25; G6B-B
Species:	Human
Source:	HEK293
Accession:	O95866/NP_612116.1 (N18-Q142)
Gene ID:	80739
Molecular Weight:	Approximately 18-23 kDa due to the glycosylation

### PROPERTIES

AA Sequence	N P G A S L D G R P      G D R V N L S C G G      V S H P I R W V W A      P S F P A C K G L S K G R R P I L W A S      S S G T P T V P P L      Q P F V G R L R S L      D S G I R R L E L L L S A G D S G T F F      C K G R H E D E S R      T V L H V L G D R T      Y C K A P G P T H G S V Y P Q
Biological Activity	Measured by its ability to induce cell death using Mv1Lu mink lung epithelial cells. The ED <sub>50</sub> for this effect is 2.344 µg/mL, corresponding to a specific activity is 4.266×10 <sup>2</sup> U/mg.
Appearance	Lyophilized powder
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH <sub>2</sub> O. 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	G6B, an inhibitory receptor, plays a crucial role in regulating hematopoietic lineage differentiation, megakaryocyte function, and platelet production. This regulatory function extends to inhibiting platelet aggregation and activation induced by various agonists like ADP and collagen-related peptide. The inhibition is mediated through the receptor's impact on CLEC1B and GP6:FcRgamma signaling, involving two immunoreceptor tyrosine-based inhibitor motifs (ITIMs). Notably, G6B operates in a calcium-independent manner. Isoform B, containing both a transmembrane region and the mentioned ITIMs,
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serves as the inhibitory counterpart, while isoform A is considered the activating counterpart of isoform B. This dual-isoform system reflects the nuanced regulatory mechanisms underlying hematopoiesis and platelet function.

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

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