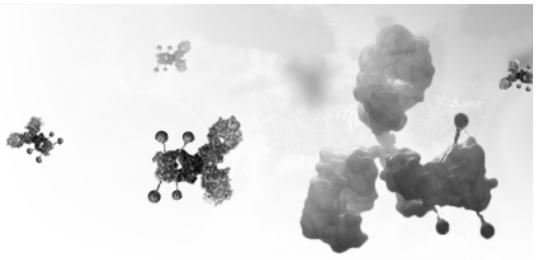

Rat Anti-Mouse NKG2A/C/E Monoclonal antibody, clone 20D5 (CABT-L4545)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	The 20D5 monoclonal antibody reacts with mouse NKG2A, NKG2C, and NKG2E also known as CD159a, CD159c, and CD159e respectively. The NKG2 receptors belong to a family of C-type lectin-like receptors that form heterodimers with CD94. NKG2/CD94 heterodimeric complexes are primarily expressed on NK cells and NKT cells. NKG2 receptors are also expressed on CD8+ T cells activated in vivo and in vitro. NKG2/CD94 heterodimeric complexes recognize Qa-1, a nonclassical MHC class I antigen, presenting the Qdm peptide. CD94/NKG2 heterodimers on NK cells transduce signals after ligand binding. NKG2A is thought to transduce inhibitory signals, while NKG2C and NKG2E transduce stimulatory signals. Blocking NKG2A signaling has been shown to promote anti-tumor immunity in murine tumor models by enhancing the activity of both T and NK cells. For this reason, NKG2A targeting is being explored as a novel immune checkpoint inhibitory therapy for treating human cancers.*An engineered recombinant mouse variant of the rat IgG2a anti-mouse NKG2A/C/E (clone 20D5) antibody with mouse IgG constant domains has been shown to block NKG2A signals in vivo in murine tumor models. BE0321 is the original 20D5 clone with rat IgG constant domains.
Target	Mouse NKG2A/C/E
Immunogen	CHO transfected cells expressing the C57BL/6 allele of NKG2A and CD94
Isotype	IgG2a, κ
Source/Host	Rat
Species Reactivity	Mouse
Clone	20D5
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE

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Conjugate	Functional Grade
Applications	in vivo NKG2A blockade (see description), in vitro NKG2A blockade, IHC-F, FC
Molecular Weight	150 kDa
Format	0.2 μM filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free] Endotoxin level: <2EU/mg (<0.002EU/μg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	Plays a role as a receptor for the recognition of MHC class I HLA-E molecules by NK cells and some cytotoxic T-cells.
Keywords	KLRC1;killer cell lectin-like receptor subfamily C, member 1;NKG2;NKG2A;CD159A;NKG2-A/NKG2-B type II integral membrane protein;NK cell receptor A;C-lectin type II protein;natural killer cell lectin;natural killer group protein 2

GENE INFORMATION

Official Symbol	killer cell lectin-like receptor subfamily C, member 1
Synonyms	KLRC1; killer cell lectin-like receptor subfamily C, member 1; NKG2; NKG2A; CD159A; NKG2-A/NKG2-B type II integral membrane protein; NK cell receptor A; C-lectin type II protein; natural killer cell lectin; natural killer group protein 2
References	Andre, P., et al. (2018). "Anti-NKG2A mAb Is a Checkpoint Inhibitor that Promotes Anti-tumor Immunity by Unleashing Both T and NK Cells." Cell 175(7): 1731-1743 e1713. PubMed;

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