HSP60 Recombinant Monoclonal Mouse Antibody (rGROEL/780)



Product Description

This antibody recognizes a 60 kDa protein, identified as the heat shock protein 60 (hsp60). Its epitope is localized between aa 383-447 of human hsp60. A wide variety of environmental and pathophysiological stressful conditions trigger the synthesis of a family of proteins known as heat shock proteins (HSPs), more appropriately called as stress response proteins (SRPs). hsp60 is a potential antigen in a number of autoimmune diseases. In human arthritis and in experimentally induced arthritis in animals, disease development coincides with the development of immune reactivity directed against not only bacterial hsp60, but also against its mammalian homolog. Clone rGROEL/780, unlike LK2, recognizes only the mammalian (not bacterial) hsp60 and is useful in distinguishing hsp60 from mammals and bacteria.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 2207, Anti-HSP60 (rGROEL/780)

Validated in protein array Antibody research areas

Product origin

Product attributes			
Antibody number	#2207		
Antibody reactivity (target)	HSP60		
Antibody type	Primary		
Host species	Mouse		
Clonality	Recombinant Monoclonal		
Clone	rGROEL/780		
Isotype	IgG1, kappa		
Molecular weight	60 kDa		
Synonyms	60kDa chaperonin, 60kDa heat shock protein mitochondrial, Chaperonin, 60-KD (CPN60), GROEL, HLD4, HSP65, HSPD1, HuCHA60, Mitochondrial matrix protein P1, P60 lymphocyte protein, Short heat shock protein 60 Hsp60s1, Spastic paraplegia 13 (SPG13)		
Human gene symbol	HSPD1		
Entrez gene ID	3329		
SwissProt	P10809		
Unigene	595053		
Immunogen	Recombinant full-length human HSP60 protein		
Verified antibody applications	IHC (FFPE) (verified), WB (verified)		
Antibody target cellular localization	Mitochondria		
Species reactivity	Chicken, Cow, Dog, Drosophila Does not react with bacteria, Hamster, Helminths, Human, Monkey, Mouse, Pig, Rabbit, Rat, Sheep, Xenopus laevis		
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunohistology (formalin): 0.5-1 ug/mL for 30 minutes at RT, Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM citrate buffer pH 6.0 for 10-20 minutes followed by cooling at RT for 20 minutes, Western blotting 0.25-0.5 ug/mL, Optimal dilution for a specific application should be determined by user		
Positive control	HeLa or HepG2 cells. Synovial biopsies from patients with juvenile chronic arthritis. Synovial lining layer is strongly positive for hsp60. Breast carcinoma.		
Shipping condition	Room temperature		
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C		
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended		
Regulatory status	For research use only (RUO)		
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide		

Autoimmunity, Heat shock proteins, Immunology, Inflammation

Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.

Call us: 800-304-5357 Email: techsupport@biotium.com

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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