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#27857**GLUL (D2O3F) Rabbit mAb (IHC Formulated)**

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Applications:	Reactivity:	Sensitivity:	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
IHC-P	H M R	Endogenous	Rabbit IgG	#P15104	2752

Product Usage Information	Application	Dilution
	Immunohistochemistry (Paraffin)	1:200
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.	
Specificity/Sensitivity	GLUL (D2O3F) Rabbit mAb (IHC Formulated) recognizes endogenous levels of total GLUL protein.	
Source / Purification	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala297 of human GLUL protein.	
Background	Glutamate-ammonia ligase (GLUL), also known as glutamine synthetase (GS), catalyzes the <i>de novo</i> synthesis of glutamine from glutamate and ammonia. GLUL is ubiquitously expressed with particularly high expression in the muscle, liver, and brain (1). GLUL expression is elevated in various cancers. Its expression is upregulated by oncogenic c-Myc (2). High expression of GLUL in breast cancer patients is associated with larger tumor size and high level of HER2 expression. It is a predictor of poor survival in patients with glioma and liver cancers (3-6).	
Background References	<ol style="list-style-type: none"> 1. Zhang, J. et al. (2017) <i>EMBO J</i> 36, 1302-1315. 2. Bott, A.J. et al. (2015) <i>Cell Metab</i> 22, 1068-77. 3. Osada, T. et al. (2000) <i>J Hepatol</i> 33, 247-53. 4. Long, J. et al. (2010) <i>Hepatobiliary Pancreat Dis Int</i> 9, 296-305. 5. Rosati, A. et al. (2013) <i>Neuro Oncol</i> 15, 618-25. 6. Wang, Y. et al. (2017) <i>J Cell Biochem</i> 118, 2018-2025. 	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Applications Key	IHC-P: Immunohistochemistry (Paraffin)
Cross-Reactivity Key	H: Human M: Mouse R: Rat
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