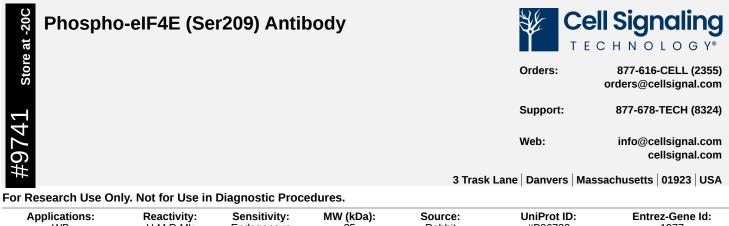
1/1/24, 2:55 PM Revision 1



WB H	M R Mk	Endogenous	25	Rabbit	#P06730	1977	
Product Usage Information	•	plication stern Blotting			Dilution 1:1000		
Storage	•	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μg/ml BSA and 50% glycerol. Store at – 20°C. Do not aliquot the antibody.					
Specificity / Sensitivity		Phospho-eIF4E (Ser209) Antibody detects endogenous levels of eIF4E only when phosphorylated at serine 209.					
Source / Purification	to re	Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser209 of human eIF4E. Antibodies are purified by protein A and peptide affinity chromatography.					
Background	tran into activ at S are stim	Eukaryotic initiation factor 4E (eIF4E) binds to the mRNA cap structure to mediate the initiation of translation (1,2). eIF4E interacts with eIF4G, a scaffold protein that promotes assembly of eIF4E and eIF4A into the eIF4F complex (2). eIF4B is thought to assist the eIF4F complex in translation initiation. Upon activation by mitogenic and/or stress stimuli mediated by Erk and p38 MAPK, Mnk1 phosphorylates eIF4E at Ser209 <i>in vivo</i> (3,4). Two Erk and p38 MAPK phosphorylation sites in mouse Mnk1 (Thr197 and Thr202) are essential for Mnk1 kinase activity (3). The carboxy-terminal region of eIF4G also contains serum-stimulated phosphorylation sites, including Ser1108, Ser1148, and Ser1192 (5). Phosphorylation at these sites is blocked by the PI3 kinase inhibitor LY294002 and by the FRAP/mTOR inhibitor rapamycin.					
Background Reference	2. G 3. W 4. P		.999) Annu. Rev. B (1999) Mol. Cell. B 999) EMBO J. 18, 2	270-9.			
Species Reactivity	Spec	ies reactivity is dete	rmined by testing i	n at least one appro	ved application (e.g., we	stern blot).	
Western Blot Buffer		IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.					
Applications Key	WB:	Western Blotting					
Cross-Reactivity Key	X: Xe	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected					
Trademarks and Patents	All ot	Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc. All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.					
Limited Uses	follov cond	Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.					
	appro Custo that o	oved, cleared, or lice omer shall not use a	ensed by the FDA o any Product for any ling statement. Pro	or other regulatory for diagnostic or therap oducts sold or licens	abeling statement and ha preign or domestic entity, peutic purpose, or otherw ed by CST are provided	for any purpose. <i>v</i> ise in any manner	

Phospho-elF4E (Ser209) Antibody (#9741) Datasheet Without Images Cell Signaling Technology

end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.