# Table of activated targets by interacting effectors

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| **Targets** | **Factors** | **References** |
| SIGNAL1 | INPUT SIGNAL | (Dal Porto et al., 2004) |
| DOK3 | INPUT SIGNAL | (Manno et al., 2016) |
| AP2M1 | INPUT SIGNAL | (Lu et al., 2002) |
| EZR | INPUT SIGNAL | (Pore & Gupta, 2015) |
| CD72 | INPUT SIGNAL | (H. J. Wu & Bondada, 2009) |
| CD40 | INPUT SIGNAL | (Francis, Karras, Ke, Sen, & Rothstein, 1995) |
| ACTIN | INPUT SIGNAL | (J. C. Wang et al., 2017) |
| TRAF2 | INPUT SIGNAL | (Hacker & Karin, 2006; Meininger & Krappmann, 2016; Mitchell, Vargas, & Hoffmann, 2016) |
| IKKA | INPUT SIGNAL | (Hacker & Karin, 2006) |
| SIGNAL2 | INPUT SIGNAL | (Brunswick, June, & Mond, 1994) |
| PIP2\_1 | INPUT SIGNAL | (Saito et al., 2003) |
| MS4A1 | INPUT SIGNAL | (Leandro, 2013) |
| PTPRC | INPUT SIGNAL | (Pao, Bedzyk, Persin, & Cambier, 1997a) |
| INPP5D | INPUT SIGNAL | (Aman, Lamkin, Okada, Kurosaki, & Ravichandran, 1998) |
| FCGR2B | INPUT SIGNAL | (Dal Porto et al., 2004) |
| PTPN11 | INPUT SIGNAL | (Ingham et al., 2001; Maeda, Kurosaki, Ono, Takai, & Kurosaki, 1998) |
| PTPN12 | INPUT SIGNAL | (Ingham et al., 2001; Maeda et al., 1998) |
| HDAC4 | INPUT SIGNAL | (Weiss et al., 2003) |
| PTEN | INPUT SIGNAL | (Maehama & Dixon, 1998) |
| PTPN6 | INPUT SIGNAL | (Ingham et al., 2001; Maeda et al., 1998) |
| PAG1 | LYN | (Ingley et al., 2006) |
| CSK | PAG1 & DOK3 | (Brdicka et al., 2000; Kawabuchi et al., 2000; Lemay, Davidson, Latour, & Veillette, 2000) |
| CDC42 | VAV | (O'Rourke et al., 1998; Turner & Billadeau, 2002) |
| BLNK | SYK & ! PTPN6 | (Fu, Turck, Kurosaki, & Chan, 1998; Ishiai et al., 1999; Mizuno et al., 2000) |
| DAPP1 | PIP3 & SYK | (Anderson et al., 2000; Stephens, Anderson, & Hawkins, 2001) |
| RHOA | NCK & PIP3 | (Homma & Emori, 1995) |
| BAD | ! AKT1 | {Thompson, 2004 #524} |
| TRAF6 | MALT1 | (Hacker & Karin, 2006; Meininger & Krappmann, 2016) |
| TAB2 | TRAF6 | (Hacker & Karin, 2006; Meininger & Krappmann, 2016) |
| MALT1 | TRAF2 & TRAF6 | (Z. J. Chen, 2012; King et al., 2006; Paul & Schaefer, 2013; Thome, 2004) |
| TAB1 | TRAF6 | (Hacker & Karin, 2006; Meininger & Krappmann, 2016) |
| BCL6 | MAPK3 | (Hatzi & Melnick, 2014) |
| EGR1 | MAPK3 | (Richards, Dave, Chou, Mamchak, & DeFranco, 2001) |
| ELK1 | MAPK3 | (Koncz, Bodor, Kovesdi, Gati, & Sarmay, 2002) |
| BCLXL | ! BAD | (Niiro et al., 2012) |
| ETS1 | ! CAMK | (Valentine et al., 1995) |
| CREB | MAPK14 | (Swart, Bergeron, & Chiles, 2000) |
| ATF2 | MAPK8 | (S. Gupta, Campbell, Derijard, & Davis, 1995) |
| NFKBIA | ! IKK | (Hayden & Ghosh, 2004) |
| NFKB1 | ! NFKBIA | (Hayden & Ghosh, 2004) |
| FOXO1 | ! AKT1 | (Yusuf, Zhu, Kharas, Chen, & Fruman, 2004) |
| MTOR | AKT1 | (Majchrzak, Witkowska, & Smolewski, 2014) |
| CD81 | CD19 | {Sato, 1997 #342} |
| CD21 | CD19 | (Sato, Miller, Howard, & Tedder, 1997; Tedder, Inaoki, & Sato, 1997) |
| IP3 | PLCG2 & PIP2 & X | (Justement, Campbell, Chien, & Cambier, 1991; Justement, Wienands, Hombach, Reth, & Cambier, 1990; Saunders & Johnson, 2010) |
| IP3R | IP3 | (Lyubchenko, 2010) |
| STIM1 | IP3R | (Lyubchenko, 2010) |
| ORAI1 | STIM1 | (Lyubchenko, 2010) |
| CRACR2A | ORAI1 | (Lyubchenko, 2010) |
| CALM1 | CA | (Gallo, Cante-Barrett, & Crabtree, 2006) |
| IKKB | MAP3K7 & TAB2 & TAB3 | (Meininger & Krappmann, 2016; C. Wang et al., 2001) |
| MAP2K6 | MAP3K1 | (Yasuda, 2016) |
| RAP1A | DAG | (McLeod & Gold, 2001) |
| PYK2B | RAP1A & CSR | (Tse et al., 2009) |
| CFL1 | RAP1A | (J. C. Wang et al., 2017) |
| RKS6KB1 | PDPK1 | (Vega et al., 2006) |
| CARD11 | PRKCB & MAP3K7 | (Shinohara et al., 2005) |
| ARPC2 | WASP | (Song et al., 2013) |
| ARPC3 | WASP | (Song et al., 2013) |
| RAF1 | KRAS | (Kawauchi et al., 1996) |
| CD22 | LYN | (Cornall et al., 1998; Smith, Tarlinton, Doody, Hibbs, & Fearon, 1998; Tedder, Poe, & Haas, 2005) |
| CLT | SYK && AP2M1 | (Stoddart et al., 2002; Traub, 2003) |
| SOS | GRB2 & LAT2 | (Brdicka et al., 2002; Chardin et al., 1993; Ravichandran, Lorenz, Shoelson, & Burakoff, 1995) |
| NCK | BLNK & SOS | (Fu et al., 1998) |
| PDPK1 | PIP2\_2 && PIP3 | (Gratacap et al., 1998; Saito, Scharenberg, & Kinet, 2001) |
| DAG | PLCG2 & PIP2 & RASGRP3 | (Zheng et al., 2005) |
| PIK3AP1 | LYN & SYK | (Okada, Maeda, Iwamatsu, Gotoh, & Kurosaki, 2000) |
| MAP2K1 | RAF1 & CD19 | (Kawauchi et al., 1996; Kyriakis et al., 1992) |
| MAPK3 | MAP2K1 & CD40 | (Sutherland, Heath, Pelech, Young, & Gold, 1996) |
| RASGRP3 | DAG | (Ehrhardt, David, Ehrhardt, & Schrader, 2004; Lorenzo et al., 2001; Zheng et al., 2005) |
| WIPF1 | WASP && ACTIN | (Arana et al., 2008) |
| MAPK14 | MAP2K6 & PRKCB | (Cuenda, Cohen, BueeScherrer, & Goedert, 1997; Doza, Cuenda, Thomas, Cohen, & Nebreda, 1995; Enslen, Raingeaud, & Davis, 1998; Goedert, Cuenda, Craxton, Jakes, & Cohen, 1997; A. Lin et al., 1995) |
| * RPS6KB1 | MTOR | (Vega et al., 2006) |
| MEF2C | MAPK14 & CA | (Blaeser, Ho, Prywes, & Chatila, 2000; Zhao et al., 1999) |
| CAMK | CALM1 & CA | (Gallo et al., 2006) |
| CaN | CALM1 & CA | (Gallo et al., 2006) |
| GAB1 | BCR & PTPN11 & LAT2 | (Brdicka et al., 2002; Ingham, Holgado-Madruga, Siu, Wong, & Gold, 1998; Ingham et al., 2001) |
| BCL10 | TRAF6 & LUBAC & CARD11 | (King et al., 2006; Paul & Schaefer, 2013; Thome, 2004) |
| MAPK8 | (MAP2K4 | MAP2K7) & CA & PRKCB | (Yasuda, 2016) |
| PIP2 | PIP5K & RHOA | (Homma & Emori, 1995; Saito et al., 2003) |
| RASA1 | PRKCB & DOK1 & FCG2RB | (Lorenzo et al., 2001; Tamir et al., 2000) |
| JUN | MAPK8 & ! HDAC4 | (Fuchs, Dolan, Davis, & Ronai, 1996; Sabapathy et al., 2004; Weiss et al., 2003) |
| NFAT | CaN & ! GSK3B | (Beurel, Michalek, & Jope, 2010; Gallo et al., 2006) |
| WASP | CDC42 || RAC1 | (Arana et al., 2008) |
| LAT2 | GRB2 & SYK | (Arana et al., 2008; Brdicka et al., 2002; Iwaki, Jensen, & Gilfillan, 2007; Koonpaew, Janssen, Zhu, & Zhang, 2004) |
| MAP3K1 | RAC1 | CDC42 | (Han et al., 1998; Yasuda, 2016) |
| GSK3B | ! AKT1 | ! PRKCB | (Astoul, Watton, & Cantrell, 1999; Christian, Sims, & Gold, 2002; Gold et al., 2000; Gold et al., 1999) |
| MAP3K7 | TAB1 && TAB2 && CARD11 | (Shinohara et al., 2005; C. Wang et al., 2001) |
| PRKCB | DAG & CA | (Kawauchi et al., 1996; Lorenzo et al., 2001; Stone, 2011) |
| DOK1 | FCGR2B && INPP5D && LYN | {Mashima, 2009 #525} |
| AKT1 | PIP3 & ! INPP5D | (Aman et al., 1998; Datta et al., 1995) |
| SYK | BCR & ! PTPN6 & PTPRC & ! CSK & ! (CBLB | CBL) | (Huang & Gu, 2008; Katkere, Rosa, & Drake, 2012; Niiro et al., 2012; Pao, Bedzyk, Persin, & Cambier, 1997b; Pao & Cambier, 1997; Sohn, Gu, & Pierce, 2003) |
| SHC1 | BCR | SYK | (Nagai, Takata, Yamamura, & Kurosaki, 1995; Pao, Famiglietti, & Cambier, 1998) |
| PIP3 | PI3K & PIP2 & ! PTEN & ! INPP5D | (Deane & Fruman, 2004; N. Gupta et al., 1999; Leung, Tarasenko, & Bolland, 2009; Maehama & Dixon, 1998) |
| PI3K | PIK3AP1 | CD19 ) & ! LYN & GAB1 & PIP2) | (CD40L & CBLB) | (Buhl & Cambier, 1999; Ingham et al., 2001; O'Rourke et al., 1998; Okada et al., 2000) |
| RAC1 | VAV & GRB2 & SOS & (BLNK | SHC2) & RAP1A | (Arana et al., 2008; D'Ambrosio, Hippen, & Cambier, 1996; Hashimoto et al., 1998; Nagai et al., 1995) |
| VAV | CD19 & ! PTPN6 & GRB2 & PIP3 & LAT2 | (Caloca, Zugaza, Matallanas, Crespo, & Bustelo, 2003; Han et al., 1998; Malhotra, Kovats, Zhang, & Coggeshall, 2009) |
| CBM | CARD11 && MALT1 && BCL10 && MAP3K7 | (Meininger & Krappmann, 2016) |
| NEMO | CBM & BCL10 & MALT1 & SQSTM1 | (Hayden & Ghosh, 2004; Meininger & Krappmann, 2016; C. J. Wu & Ashwell, 2008) |
| IKK | IKKAB & NEMO & MAP3K7 & IKKB | (Hacker & Karin, 2006; X. Lin, Cunningham, Mu, Geleziunas, & Greene, 1999; Meininger & Krappmann, 2016) |
| CD19 | SIGNAL2 & BCR & ! INPP5D & (LYN | FYN) & CD21 & CD81 | (Chalupny et al., 1995; Cherukuri et al., 2004; Liu et al., 1998; van Noesel, Lankester, van Schijndel, & van Lier, 1993) |
| KRAS | (VAV & GRB2 & SOS & LYN & RHOA) | RASGRP3 | RASA1 | BLNK | SHC2 | (Caloca et al., 2003; Y. Chen et al., 2016; Chiu, Dalton, Ishiai, Kurosaki, & Chan, 2002; Ehrhardt et al., 2004; Ishiai et al., 1999; Jiang, Craxton, Kurosaki, & Clark, 1998; Oh-hora, Johmura, Hashimoto, Hikida, & Kurosaki, 2003; Tamir et al., 2000) |
| GRB2 | CD22 & CD72 & PIP3 & PTPN11 & DOK3 & SHC1 & LAT2 | (D'Ambrosio et al., 1996; Ingham et al., 2001; Law et al., 1996; Otipoby, Draves, & Clark, 2001; Stork et al., 2007) |
| DARM | WIPF1 && EZR && CFL1 && PYK2B && ACTIN | WIPF1 && EZR && CFL1 && PYK2B && ACTIN |
| PLCG2 | (BLNK | PIP3 | PIP2 | DAPP1) & SYK & BTK & CBLB | (Bae et al., 1998; Chiu et al., 2002; Gratacap et al., 1998; Ishiai et al., 1999; Marshall et al., 2000; Yasuda et al., 2002) |
| BTK | PIP3 & BLNK & SYK & LYN & PRKCB | (Baba et al., 2001; Buhl & Cambier, 1999; Kang et al., 2001; Kurosaki & Kurosaki, 1997; Rawlings et al., 1996; Saito et al., 2001) |
| BCR | SIGNAL1 && LYN && ~PTPN6 && ~PTPN11 && ~FCGR2B | (Daeron, 1997; Flaswinkel & Reth, 1994; Gauld & Cambier, 2004; Liu et al., 1998; Nel, Landreth, Goldschmidtclermont, Tung, & Galbraith, 1984; Pani, Kozlowski, Cambier, Mills, & Siminovitch, 1995; Szydlowski, Jablonska, & Juszczynski, 2014) |
| CA | IP3 & IP3R & STIM1 & ORAI1 & CRACR2A | (Lyubchenko, 2010) |
| IBCR | CLATHRIN & DAPP1 & EZR & RAC1 | (N. Gupta & DeFranco, 2007; Malhotra et al., 2009; Niiro et al., 2004; Stoddart et al., 2002) |
| LYN | BCR & PTPRC & ! CSK & CD19 | (Dal Porto et al., 2004; Ingley et al., 2006; Pao et al., 1997b; Pleiman et al., 1994) |

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